

**DuPont™ Joint Adhesive 2.0 Component A**

Version 2.0

Revision Date 08/31/2015

Ref. 150000004230

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : DuPont™ Joint Adhesive 2.0 Component A
Product Use : Adhesives

Restrictions on use : Do not use product for anything outside of the above specified uses
Manufacturer/Supplier : DuPont
Building Innovations
974 Centre Road
Wilmington, Delaware 19805

Product Information : 1-302-774-1000
Medical Emergency : 1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency : CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

Other information : professional use

SECTION 2. HAZARDS IDENTIFICATION**Product hazard category**

Flammable liquids	Category 2
Skin irritation	Category 2
Skin sensitization	Category 1
Specific target organ toxicity - single exposure	Category 3

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Label content

Pictogram

:



Signal word

: Danger

Hazardous warnings

: Highly flammable liquid and vapor.
Causes skin irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.
May cause drowsiness or dizziness.


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Hazardous prevention measures :

- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ ventilating/ lighting/ equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
- Wash skin thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective gloves/ eye protection/ face protection.
- IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing.
- Rinse skin with water/ shower.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/ physician if you feel unwell.
- If skin irritation or rash occurs: Get medical advice/ attention.
- Take off contaminated clothing and wash before reuse.
- In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
- Store in a well-ventilated place. Keep container tightly closed.
- Store in a well-ventilated place. Keep cool.
- Store locked up.
- Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Vapours may form explosive mixtures with air.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 73.5869 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration


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Methyl methacrylate	80-62-6	45 - 65 %
Styrene-acrylonitrile copolymer		25 - 40 %
Propylidynetrimehyl trimethacrylate	3290-92-4	<=5 %
3-Trimethoxysilylpropyl methacrylate	2530-85-0	<=5 %
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		<=1 %

SECTION 4. FIRST AID MEASURES

General advice	: Never give anything by mouth to an unconscious person.
Inhalation	: Remove from exposure, lie down. Consult a physician after significant exposure.
Skin contact	: Wash off immediately with soap and plenty of water.
Eye contact	: Remove contact lenses. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Keep eye wide open while rinsing.
Ingestion	: Clean mouth with water and drink afterwards plenty of water. Ingest activated charcoal. Do not induce vomiting without medical advice.
Most important symptoms/effects, acute and delayed	: No applicable data available.
Protection of first-aiders	: No applicable data available.
Notes to physician	: No applicable data available.

SECTION 5. FIREFIGHTING MEASURES

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- Suitable extinguishing media : Water spray, Foam, Dry powder, Carbon dioxide (CO₂), Keep containers and surroundings cool with water spray.
- Unsuitable extinguishing media : Do NOT use water jet.
- Specific hazards : Hazardous combustion products
Carbon monoxide Carbon dioxide (CO₂) Biphenyls
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.
- Further information : Evacuate personnel and keep upwind of fire. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

- Safeguards (Personnel) : Ensure adequate ventilation. Remove all sources of ignition.
- Environmental precautions : Prevent product from entering drains.
- Spill Cleanup : Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Clean with detergents. Avoid solvents.
- Accidental Release Measures : No applicable data available.

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Avoid contact with skin and eyes. Use only in well-ventilated areas.
Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feedingstuffs. Wash contaminated clothing before re-use.
- Handling (Physical Aspects) : Keep product and empty container away from heat and sources of ignition. When using do not smoke.



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Dust explosion class : No applicable data available.
 Storage : Keep tightly closed in a dry, cool and well-ventilated place.
 No materials to be especially mentioned.
 Storage period : <= 24 Months
 Storage temperature : 13 - 24 °C (55 - 75 °F)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : Use sufficient ventilation to keep employee exposure below recommended limits.
 Personal protective equipment
 Respiratory protection : No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment. Mask with gas filter, type A (EN 141)
 Hand protection : Additional protection: Rubber gloves
 Eye protection : Safety glasses

Exposure Guidelines
 Exposure Limit Values

Methyl methacrylate				
Permissible exposure limit:	(OSHA)	100 ppm	410 mg/m3	8 hr. TWA
TLV	(ACGIH)	50 ppm	TWA	
TLV	(ACGIH)	100 ppm	STEL	

Titanium dioxide				
Permissible exposure limit:	(OSHA)	15 mg/m3	8 hr. TWA	Total dust.
TLV	(ACGIH)	10 mg/m3	TWA	
AEL *	(DUPONT)	10 mg/m3	8 & 12 hr. TWA	Total dust.
AEL *	(DUPONT)	5 mg/m3	8 & 12 hr. TWA	Respirable dust.

Carbon black


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Permissible exposure limit:	(OSHA)	3.5 mg/m ³	8 hr. TWA
TLV	(ACGIH)	3 mg/m ³	TWA Inhalable fraction.
AEL *	(DUPONT)	0.5 mg/m ³	8 & 12 hr. TWA Polynuclear Aromatic Hydrocarbons (PAH) < 0.1%

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	: liquid
Form	: liquid
Color	: various

Odor : acrylic-like

Odor threshold : No applicable data available.

pH : Not applicable

Melting point/range : No applicable data available.

Boiling point/boiling range : No applicable data available.

Flash point : 10 °C
closed cup

Evaporation rate : No applicable data available.

Flammability (solid, gas) : No applicable data available.

Upper explosion limit : 12.5 vol%

Lower explosion limit : 2.1 vol%

Vapor pressure : 39 hPa at 20 °C (68 °F)

Vapour density : No applicable data available.

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Density	: ca. 1.0 g/cm ³
Specific gravity (Relative density)	: ca. 1.0
Water solubility	: partly miscible
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: No applicable data available.
Auto-ignition temperature	: No applicable data available.
Ignition temperature	: 430 °C
Decomposition temperature	: No applicable data available.
Viscosity, kinematic	: No applicable data available.
Viscosity, dynamic	: no data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: The material may slowly polymerize if heated or if inerted with nitrogen.
Chemical stability	: Stable in the presence of inhibitor. No decomposition if used as directed.
Possibility of hazardous reactions	: Susceptible to polymerization initiated by prolonged heating or the presence of initiator.
Conditions to avoid	: Heat Direct sunlight.
Incompatible materials	: Reducing agents Oxidizing agents
Hazardous decomposition products	: To avoid thermal decomposition, do not overheat.

SECTION 11. TOXICOLOGICAL INFORMATION

Methyl methacrylate

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Inhalation 4 h LC50	:	29.8 mg/l , Rat Target Organs: Respiratory system
Dermal LD50	:	> 5,000 mg/kg , Rabbit
Oral LD50	:	6,550 mg/kg , Rabbit
Skin irritation	:	Severe skin irritation, Rabbit
Eye irritation	:	No eye irritation, Rabbit
Skin sensitization	:	May cause sensitisation by skin contact., Guinea pig Does not cause respiratory sensitisation., human
Repeated dose toxicity	:	Oral Rat - NOAEL: > 3300, No toxicologically significant effects were found.
Carcinogenicity	:	Not classifiable as a human carcinogen. Animal testing did not show any carcinogenic effects.
Mutagenicity	:	Animal testing did not show any mutagenic effects.
Reproductive toxicity	:	No toxicity to reproduction No effects on or via lactation Animal testing showed no reproductive toxicity.
Teratogenicity	:	Animal testing showed no developmental toxicity.
Styrene-acrylonitrile copolymer		
Dermal LD50	:	> 2,000 mg/kg , Rabbit
Oral LD50	:	> 5,000 mg/kg , Rat
Further information	:	The substance is a polymer and is not expected to produce toxic effects.
Propylidynetrimethyl trimethacrylate		
Dermal LD50	:	17,000 mg/kg , Rabbit
Oral LD50	:	25,530 mg/kg , Rat

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Skin irritation	:	slight irritation, Rabbit
Eye irritation	:	slight irritation, Rabbit
Skin sensitization	:	Did not cause sensitisation on laboratory animals., Guinea pig There are rare or inconclusive reports of human skin sensitization.
Repeated dose toxicity	:	Oral Rat - No adverse effect has been observed in chronic toxicity tests. Dermal Rabbit - No adverse effect has been observed in chronic toxicity tests.
Mutagenicity	:	Animal testing did not show any mutagenic effects. Overall weight of evidence indicates that the substance is not mutagenic. Did not cause genetic damage in cultured bacterial cells. Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others.
Reproductive toxicity	:	No toxicity to reproduction Animal testing showed no reproductive toxicity.
Teratogenicity	:	Animal testing showed no developmental toxicity.
3-Trimethoxysilylpropyl methacrylate Inhalation	:	Rat An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
Dermal LD50	:	> 2,000 mg/kg , Rat
Oral LD50	:	> 2,000 mg/kg , Rat
Skin irritation	:	No skin irritation, Rabbit
Eye irritation	:	No eye irritation, Rabbit
Repeated dose toxicity	:	Inhalation


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Rat

-

Respiratory irritation, No toxicologically significant effects were found.

Carcinogenicity : no data available

Mutagenicity : Animal testing did not show any mutagenic effects.
 Did not cause genetic damage in cultured bacterial cells.
 Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others.

Reproductive toxicity : no data available

Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

Material	IARC	NTP	OSHA
Titanium dioxide	2B		

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Methyl methacrylate

96 h LC50	:	Oncorhynchus mykiss (rainbow trout) > 79 mg/l
72 h ErC50	:	Pseudokirchneriella subcapitata (green algae) > 110 mg/l OECD Test Guideline 201
72 h NOEC	:	Pseudokirchneriella subcapitata (green algae) 110 mg/l OECD Test Guideline 201
48 h EC50	:	Daphnia magna (Water flea) 69 mg/l see user defined free text
35 d	:	NOEC Danio rerio (zebra fish) 9.4 mg/l OECD Test Guideline 210
21 d	:	NOEC Daphnia magna (Water flea) 37 mg/l OECD Test Guideline


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Styrene-acrylonitrile copolymer

: The substance is a polymer and is not expected to produce toxic effects.

Propylidynetrimethyl trimethacrylate

96 h LC50

: Oncorhynchus mykiss (rainbow trout) 1 - 10 mg/l

72 h ErC50

: Pseudokirchneriella subcapitata (green algae) 1 - 10 mg/l

3-Trimethoxysilylpropyl methacrylate

96 h LC50

: Danio rerio (zebra fish) > 100 mg/l Directive 67/548/EEC, Annex V, C.1.

72 h ErC50

: Desmodesmus subspicatus (green algae) > 100 mg/l Directive 67/548/EEC, Annex V, C.3.

72 h NOEC

: Desmodesmus subspicatus (green algae) > 100 mg/l Directive 67/548/EEC, Annex V, C.3.

48 h EC50

: Daphnia magna (Water flea) > 100 mg/l Directive 67/548/EEC, Annex V, C.2.

Environmental Fate

Methyl methacrylate

Biodegradability

: rapidly biodegradable OECD Test Guideline 301C
Readily biodegradable

Bioaccumulation

: Bioaccumulation is unlikely.

Propylidynetrimethyl trimethacrylate

Biodegradability

: 50 - 59 %
Not readily biodegradable.

3-Trimethoxysilylpropyl methacrylate

Biodegradability

: Biodegradable 69 % OECD Test Guideline 301F

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods - : Do not dispose of waste into sewer. Dispose of as special waste in



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Product compliance with local and national regulations.

Contaminated packaging : Dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

DOT	UN number	: 1133
	Proper shipping name	: Adhesives
	Class	: 3
	Packing group	: II
	Labelling No.	: 3
	Reportable Quantity	: 1000 lbs
IATA_C	UN number	: 1133
	Proper shipping name	: Adhesives
	Class	: 3
	Packing group	: II
	Labelling No.	: 3
IMDG	UN number	: 1133
	Proper shipping name	: ADHESIVES
	Class	: 3
	Packing group	: II
	Labelling No.	: 3

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s) : Methyl methacrylate

PA Right to Know Regulated Chemical(s) : Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances):
Methyl methacrylate

NJ Right to Know Regulated Chemical(s) : Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as

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carcinogens, mutagens or teratogens): Methyl methacrylate,
Poly(Acrylonitrile/Styrene)

CERCLA Reportable Quantity : 1667 lbs
Based on the percentage composition of this chemical in the product.:
Methyl methacrylate

California Prop. 65 : WARNING! This product contains a chemical or chemicals known to the State of California to cause cancer. Carbon black, Titanium dioxide
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Methanol

SECTION 16. OTHER INFORMATION

Restrictions for use : Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of the DuPont POLICY Regarding Medical Applications and DuPont CAUTION Regarding Medical Applications.

Before use read DuPont's safety information.

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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