



NPR 6985

Version 2.0

Revision Date 07/09/2008

Ref. 15000002499

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	:	NPR 6985
Product Grade/Type	:	NPR 6985
MSDS Number	:	15000002499
Product Use	:	Chemical intermediate
Manufacturer	:	DuPont Performance Elastomers L.L.C Bellevue Park Corporate Center, 300 Bellevue Parkway Wilmington, Delaware 19809
Product Information	:	1-800-441-7515 (outside the U.S. 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. 703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Potential Health Effects

Skin

2-chlorobuta-1,3-diene; chloroprene	:	May irritate skin.
Dichloromethane	:	Causes skin irritation.

Eyes

2-chlorobuta-1,3-diene; chloroprene	:	Causes eye irritation.
Dichloromethane	:	Causes eye irritation.

Inhalation

2-chlorobuta-1,3-diene; chloroprene	:	May cause respiratory tract irritation. Shortness of breath, Fluid retention in lungs (pulmonary oedema), Symptoms may be delayed.. Inhalation may cause central nervous system effects. dizziness, confusion, incoordination, drowsiness, or unconsciousness Abnormal liver function altered blood chemistry, Liver damage.
Dichloromethane	:	Liver effects Altered lung function or difficulty breathing, altered blood chemistry, Inhalation of high vapour concentrations can cause CNS-depression and narcosis..

Ingestion

Dichloromethane	:	Central nervous system depression Gastrointestinal ulceration, altered blood chemistry.
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Repeated exposure

2-chlorobuta-1,3-diene; chloroprene	:	Liver damage altered blood chemistry Respiratory tract damage
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Dichloromethane : Liver damage altered blood chemistry

Target Organs

2-chlorobuta-1,3-diene; chloroprene : Liver Blood Respiratory Tract Central nervous system

Dichloromethane : Liver Lungs Blood

Carcinogenicity
Material

IARC

NTP

OSHA

ACGIH

Dichloromethane
2-chlorobuta-1,3-diene;
chloroprene2B
2BX
X

X

A3

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
2-chlorobuta-1,3-diene; chloroprene	126-99-8	<50 %
Dichloromethane	75-09-2	>49%

SECTION 4. FIRST AID MEASURES

- Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before re-use. Discard contaminated shoes.
- Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. Consult a physician.
- Inhalation : Immediately move to fresh air. Symptoms may be delayed. Call a physician.
- Ingestion : If victim is conscious: Do not induce vomiting. Drink water. Call physician immediately.
- General advice : If symptoms persist, call a physician.
- Notes to physician : Activated charcoal may be beneficial.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable Properties

Flash point : 43.3 °C (109.9 °F) closed cup



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- Fire and Explosion Hazard : Vapours may form explosive mixtures with air. Hazardous combustion products Hydrogen chloride Carbon dioxide (CO₂) Under conditions giving incomplete combustion, hazardous gases produced may consist of: Hydrogen chloride gas Carbon oxides Organic acids Aldehydes Alcohols
- Extinguishing Media : Foam, Carbon dioxide (CO₂), Dry chemical
- Firefighting Instructions : Wear self-contained breathing apparatus and protective suit. Evacuate personnel to safe areas. 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) : Wear self-contained breathing apparatus and protective suit.
- Spill Cleanup : Remove all sources of ignition. Dam up. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
- Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas. Dispose of promptly.

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mist. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing. When using do not eat, drink or smoke.
- Handling (Physical Aspects) : Keep away from heat and sources of ignition. Use non-sparking tools and grounded/bonded equipment and containers when transferring.
- Storage : Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks and flames.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : Use only in area provided with appropriate exhaust ventilation.
- Personal protective equipment
 - Eye protection : Wear safety glasses. Wear coverall chemical splash goggles and face shield when the possibility exists for eye and face contact due to splashing or spraying of material.



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- Skin protection : Wear as appropriate: To prevent any contact, wear impervious clothing such as gloves, apron, boots, jacket, pants, hood or totally encapsulating chemical suit with breathing air supply.
- Respiratory protection : Where there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

Exposure Guidelines

Exposure Limit Values

Hydrogen chloride (gas)

PEL	(OSHA)	5 ppm	7 mg/m3	Ceiling
TLV	(ACGIH)	2 ppm	Ceiling	

Skin designation applies.

Dichloromethane

PEL	(OSHA)	125 ppm	STEL	
PEL	(OSHA)	25 ppm	TWA	
TLV	(ACGIH)	50 ppm	TWA	
AEL *	(DUPONT)	25 ppm	12 hr. TWA	
AEL *	(DUPONT)	50 ppm	8 hr. TWA	

2-chlorobuta-1,3-diene; chloroprene

PEL	(OSHA)	25 ppm	90 mg/m3	8 hr. TWA
			Skin designation applies.	
TLV	(ACGIH)	10 ppm	8 hr. TWA	
			Skin designation applies.	
AEL *	(DUPONT)	2 ppm	8 & 12 hr. TWA	

* 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

- Form : liquid
- Color : none
- Odor : hydrocarbon-like
- Boiling point : ca. 59.4 °C (138.9 °F)
(for a component of this mixture)
- % Volatile : 100 %
- Density : 1.105 g/cm3
- Water solubility : slightly soluble

SECTION 10. STABILITY AND REACTIVITY

- Stability : This material readily polymerizes with the evolution of heat, particularly in the absence of polymerization inhibitors. This material readily dimerizes especially at elevated temperature. The dimerization reaction can not be prevented. However, the rate of dimerization can be reduced by dilution and/or low temperature (0 degree C) storage.



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"Properties and Handling of chloroprene (CD)" (H71077).
 Material can spontaneously polymerize by addition of oxidizing agents or peroxides or exposure to air.

- Conditions to avoid : Heat, flames and sparks. Elevated temperature
- Incompatibility : Peroxides Oxidizing agents Air Polymerization catalyst This material readily absorbs oxygen to form peroxides, which can decompose violently. They can also decompose to free radicals which can initiate polymerization.
- Polymerization : Polymerization can occur.

SECTION 11. TOXICOLOGICAL INFORMATION

2-chlorobuta-1,3-diene; chloroprene

- Oral LD50 : 251 mg/kg, rat
- Inhalation 4 h LC50 : 11.8 mg/l, rat
 Liver damage
 lung effects
 Central nervous system effects
- Skin irritation : Species: rabbit
 irritant
- Eye irritation : Species: rabbit
 irritant
- Repeated dose toxicity : Inhalation, rat
 Respiratory tract damage, Liver damage, Abnormal decrease in number of red blood cells (anaemia)
- Carcinogenicity : An increased incidence of tumours was observed in laboratory animals., No increased risk of cancer in humans has been shown in workplace-based studies.
- Mutagenicity : Genetic damage in animals was observed in some laboratory tests but not in others., Genetic damage in cultured bacterial cells was observed in some laboratory tests but not in others., Did not cause genetic damage in cultured mammalian cells.
- Toxicity to reproduction : Evidence suggests the substance is not a reproductive toxin in animals.
- Teratogenicity : Evidence suggests the substance is not a developmental toxin in animals.
- Dichloromethane
 Dermal LD50 : > 2,000 mg/kg, rat

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Oral LD50	:	1,410 mg/kg, rat
Inhalation 4 h ALC	:	48.58 mg/l, rat
Skin irritation	:	Species: rabbit irritant
Eye irritation	:	Species: rabbit irritant
Repeated dose toxicity	:	Inhalation, rat Liver damage, Lung damage Oral, rat Liver damage, Lung damage
Carcinogenicity	:	An increased incidence of tumours was observed in laboratory animals.
Mutagenicity	:	Experiments showed mutagenic effects in cultured bacterial cells., Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others., Genetic damage in animals was observed in some laboratory tests but not in others.
Toxicity to reproduction	:	Evidence suggests the substance is not a reproductive toxin in animals.
Teratogenicity	:	Animal testing showed effects on embryo-foetal development at levels equal to or above those causing maternal toxicity.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

2-chlorobuta-1,3-diene; chloroprene

96 h LC50 : Leuciscus idus (Golden orfe) 200 mg/l

24 h EC50 : Daphnia magna (Water flea) 348 mg/l

Dichloromethane

96 h LC50 : Pimephales promelas (fathead minnow) 193 mg/l

48 h EC50 : Daphnia magna (Water flea) 220 mg/l

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : Dispose of wastes in an approved waste disposal facility. Incinerate only in incinerators capable of scrubbing out acidic combustion products. Comply



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with applicable Federal, State/Provincial and Local Regulations.

Container Disposal : Refer to the product label for instructions.

SECTION 14. TRANSPORT INFORMATION

DOT	UN-Number	: 1992
	Proper shipping name	: Flammable liquids, toxic, n.o.s. (2-Chloro-1,3-Butadiene, Methylene chloride)
	Class	: 3
	Packaging group	: III
	Labelling No.	: 3 (6.1)
	Reportable Quantity	: 202 lbs (2-chlorobuta-1,3-diene; chloroprene)
	Reportable Quantity	: 2,004 lbs (Dichloromethane)
IATA_C	UN-Number	: 1992
	Proper shipping name	: Flammable liquid, toxic, n.o.s. (2-Chloro-1,3-Butadiene, Methylene chloride)
	Class	: 3
	Packaging group	: III
	Labelling No.	: 3 (6.1)
IMDG	UN-Number	: 1992
	Proper shipping name	: Flammable liquid, toxic, n.o.s. (2-Chloro-1,3-Butadiene, Methylene chloride)
	Class	: 3
	Packaging group	: III
	Labelling No.	: 3 (6.1)

SECTION 15. REGULATORY INFORMATION

TSCA Status	: In compliance with TSCA Inventory requirements for commercial purposes.
SARA 313 Regulated Chemical(s)	: Dichloromethane, 2-chlorobuta-1,3-diene; chloroprene
CERCLA Reportable Quantity	: 202 lbs Based on the percentage composition of this chemical in the product.: 2-chlorobuta-1,3-diene; chloroprene
CERCLA Reportable Quantity	2,004 lbs Based on the percentage composition of this chemical in the product.: Dichloromethane
California Prop. 65	: WARNING! This product contains a chemical known in the State of California to cause cancer. Dichloromethane, (E)-1,4-Dichloro-2-Butene, 2-chlorobuta-1,3-diene; chloroprene WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.



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Toluene

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): Dichloromethane, 2-chlorobuta-1,3-diene; chloroprene

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 carcinogens, mutagens or teratogens): Dichloromethane, 2-chlorobuta-1,3-diene; chloroprene

SECTION 16. OTHER INFORMATION

Restrictions for use : Do not use in medical applications involving permanent implantation in the human body. For other medical applications see DuPont Performance Elastomer's caution bulletin No. H-69237.

Before use read DuPont Performance Elastomer's safety information.® Registered trademark of DuPont Performance Elastomers

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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