Material Safety Data Sheet

Part No.: 0307

FLEXANE 80 PUTTY CURING AGENT

This product appears in the following stock number(s):

15165 15820 15850 16920 DE120

Last revised: 12/07/01 Printed: 12/10/2001

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: FLEXANE 80 PUTTY CURING AGENT

Product Identifier: FLEXANE CURING AGENT

General use: This information applies to the hardener component of the two-part kit. After proper mixing and

curing, product is not hazardous.

Chemical family: Polyamine solution

MANUFACTURER

ITW Devcon 30 Endicott St. Danvers, MA 01923

EMERGENCY INFORMATION

Emergency telephone number (CHEMTREC): (800) 424-9300

Other Calls: (978) 777-1100

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS CONSTITUENTS

Exposure lin	nits
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Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Carbon black		1333864	1-5	3.5 mg/m^3	3.5 mg/m^3	n/e
Diethyltoluenediamine		68479981	30-50	n/e	n/e	0.02 ppm (manufacturer)

[&]quot;TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit."n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance, form, odor: Mobile, black liquid with mild, ammonia-like odor.

WARNING! Eye, skin and respiratory irritant. Harmful if inhaled, ingested or absorbed through skin. May cause methemoglobin formation. May cause delayed allergic skin reaction.

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Primary routes of exposure: Skin contact Skin absorption Eye contact Inhalation Ingestion

Symptoms of acute overexposure:

Skin: Irritant. Symptoms may include pain, excess redness & swelling with chemical burn, blistering formation and possible tissue destruction. Expected to be toxic by dermal absorption.

Eyes: Irritant. Symptoms may include pain, excessive blinking, tearing, excess redness, swelling, chemical burns of the eye.

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Inhalation:

Not expected to be a route of exposure due to its low volatility. Vapors or mists may cause irritation of upper respiratory tract (nasal discharge, coughing). Severe overexposure may result in difficulty breathing, nausea, drowsiness, vomiting.

Ingestion:

Expected to be toxic severe. May cause burning of mouth, throat, and stomach with abdominal and chest pain, nausea, vomiting, diarrhea, thirst, weakness and collapse. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Effects of chronic overexposure:

Repeated and/or prolonged contact may cause a dermatitis reaction or other allergic reaction.

Carcinogenicity -- OSHA regulated: No ACGIH: No National Toxicology Program: No

International Agency for Research on Cancer:Yes Other agency: Animal test (DETDA)

Cancer-suspect constituent(s): IARC: Respirable Carbon Black dusts

Medical conditions which may be aggravated by exposure:

Pre-existing eye and skin disorders.

Other effects:

Overexposure to aromatic amines through inhalation, skin contact and absorption, or ingestion can cause methemoglobinemia, reduced ability of the blood to carry oxygen (signs include purplish-blue color of the skin, lips, fingernails). See Section 11.

4. FIRST AID MEASURES

First aid for eves:

Flush eye with clean water for at least 20 minutes while gently holding eyelids open, lifting upper and lower lids. Get immediate medical attention.

First aid for skin:

Immediately remove contaminated clothing and excess contaminant. Wash affected areas with Polyethylene Glycol 400 if available. Flush skin with water for at least 15 minutes. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.

First aid for inhalation:

Remove patient to fresh air. Administer oxygen if breathing is difficult. Get medical attention if symptoms persist.

First aid for ingestion:

Administer 3-4 glasses of water and induce vomiting if conscious and not convulsing. Keep head below hips to prevent aspiration. If extensive vomiting has not occurred, the substance should be removed by emesis or gastric lavage provided the victim is conscious and not convulsing. Never give anything by mouth to an unconscious person. If victim is unconscious and vomiting occurs spontaneously, keep head to the side to prevent aspiration. Get immediate medical attention.

Note to physician:

If cyanotic (lips and fingernails turn blue) give oxygen. Absorption of this product into the body leads to the formation of methemoglobin that in sufficient concentrations causes cyanosis. Since reversion of methemoglobin to hemoblobin occurs spontaneously after termination of exposure, moderate degrees of cyanosis need be treated only by supportive measures such as bed rest and oxygen inhalation. Thorough cleaning of the entire contaminated area of the body including scalp and nails is extremely important.

5. FIRE FIGHTING MEASURES

General fire and explosion characteristics:

Material supports combustion.

Flash Point (°F): > 275 Method: TCC

Explosive limits in air (percent) -- Lower: n/d Upper: n/d

Special firefighting procedures:

Do not enter confined space without full bunker gear. Firefighters should wear self-contained breathing apparatus and protective clothing to prevent all skin and eye contact with this material. Cool fire exposed containers with water.

Unusual fire and explosion hazards:

Sudden reaction and fire may result if product is mixed with an oxidizing agent. Personnel in vicinity and downwind should be evacuated. Water or foam may cause frothing. Containers may rupture from heat.

Hazardous products of combustion:

Acrid and toxic fumes with organic amines, ammonia, oxides of carbon and nitrogen.

6. ACCIDENTAL RELEASE MEASURES

Spill control:

Avoid personal contact. Evacuate area. Eliminate ignition sources. Ventilate area.

Containment:

Dike, contain and absorb with clay, sand or other suitable material.

Cleanup:

For large spills, pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly. Flush area with water to remove trace residue. Clean-up waste water should be placed in appropriate containers for proper disposal.

Special procedures:

Prevent spill from entering drainage/sewer systems, waterways, and surface waters. Collect run-off water and transfer to drums or tanks for later disposal. Notify local health authorities and other appropriate agencies if such contamination occurs.

7. HANDLING AND STORAGE

Handling precautions:

Avoid breathing vapors. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing and protective gear before reuse. Discard contaminated leather articles. Handle mixed resin and hardener in accordance with the potential hazard of the curing agent used. Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.

Storage:

Store in a cool, dry area away from high temperatures and flames. Do not store in reactive metal containers. Keep away from acids, oxidizers. Keep container tightly closed when not in use. Material is hygroscopic and may absorb small amounts of atmospheric moisture.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

Ventilation:

Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits (or to the lowest feasible levels when limits have not been established). Although good general mechanical ventilation is usually adequate for most industrial applications, local exhaust ventilation is preferred (see ACGIH - Industrial Ventilation). Local exhaust may be required for confined areas (see OSHA 1910.146).

Other engineering controls:

Have emergency shower and eye wash stations available.

Personal protective equipment

Eye and face protection:

Splashproof goggles or face shield. Contact lenses should not be worn while working with product.

Skin protection:

Chemical resistant rubber gloves (butyl rubber, nitrile) and other protective gear as required to prevent skin contact.

Respiratory protection:

None needed in normal use with proper ventilation. In poorly ventilated areas use NIOSH approved organic vapor cartidges respirator for uncured resin, dust/particle respirators during grinding/sanding operations for cured resin, or fresh airline respirator as exposure levels dictate (see OSHA 1910.134).

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity: 1.08 Boiling point (°F): >450 Melting point (°F): n/d Vapor density (air = 1): >1 <1 at 70 °F Vapor pressure (mmHq): Evaporation rate (butyl acetate = 1): <<1 Nil VOC (grams/liter): Solubility in water: Percent volatile by volume: 0 pH (5% solution or slurry in water): 7-8

Percent solids by weight: 100

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to avoid:

Extreme heat, sparks, static electricity, electric arcs, and open flame.

Incompatible materials:

Strong acids and oxidizers (e.g. chlorine, oxygen, permanganates, perchlorates, percarbonates, peroxides, chromates, hypochlorites, nitric acid, sulfuric acid).

Hazardous products of decomposition:

Oxides of carbon and nitrogen; oxides of amines and traces of hydrogen cyanide. Aldehydes & nitro compounds from incomplete combustion.

Conditions under which hazardous polymerization may occur:

Heat is generated when resin is mixed with curing agents; Run-a-way cure reactions may char and decompose the

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resin, generating unidentified fumes and vapors which may be toxic.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): >500 mg/kg

Acute dermal effects: LD50 (rabbit): >1000 mg/kg

Acute inhalation effects: LC50 (rat): No data

Exposure: hours.

DETDA: Exposure of rats to aerosols for 1 hr at 2.45 mg/L did not produce mortality. Carbon black (1 hr, rat)

LC50=27,000 mg/m3

Eye irritation:

DETDA: Moderate to severe irritation to rabbits eyes.

Subchronic effects:

DETDA: Sensitization to has been reported. A subchronic 21-day toxicity study was conducted on rabbits. Repeated dermal applications at 1, 10 and 100 mg/kg for 3 weeks (5 days/week) resulted in mild to moderate local irritation at the 10 and 100 mg/kg doses.

Carcinogenicity, teratogenicity, and mutagenicity:

DETDA was positive in In vitro mutagenic tests as evidenced by an increase in the number of tumors in the liver and thyroid of male rats and in the liver and possibly mammary glands of female rats. Carbon black has been shown to have In Vivo mutagenic effects on a rat lung cells.

Other chronic effects:

A two-year feeding study in rats with DETDA caused effects in the pancreas, liver, thyroid, and eyes.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Carbon black	n/d	n/d	6750 mg/m3
Diethyltoluenediamine	> 500 mg/kg	> 700 mg/kg	> 0.6 mg/L

'n/d' = 'not determined'

12 ECOLOGICAL INFORMATION

Ecotoxicity:

Not available.

Mobility and persistence:

Not available.

Environmental fate:

Not available.

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13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Waste management recommendations:

If this resin becomes a waste, it would not be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state, and local regulations. Incineration is the preferred method of disposal. Empty containers retain product residue (liquid and / or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition.

14. TRANSPORT INFORMATION

Proper shipping name: Non-regulated

Technical name : N/A
Hazard class : N/A
UN number: N/A
Packing group: N/A

Emergency Response Guide no.: N/A

IMDG page number: N/A
Other: N/A

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

None

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Carbon black	No	No	0.0	Not required
Diethyltoluenediamine	No	No	0.0	Not required

^{*}Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard -- Delayed health hazard --

Canadian regulations

^{**}Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

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WHMIS hazard class(es): D2B; D2A

All components of this product are on the Domestic Substances List.

16. OTHER INFORMATION

Hazardous Materials Identification System (HMIS) ratings:	Health 2*	Flammability	Reactivity 0

Other information:

This material has been tested in accordance with the requirements of 49CFR 173.136 and found not to be corrosive for transportation.

The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.

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FLEXANE 80 PUTTY RESIN

This product appears in the following stock number(s):

15165 15820 15850 16920 DE120 DF324

04/11/00 Printed: 12/10/2001

Last revised:

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: FLEXANE 80 PUTTY RESIN

Product Identifier: FLEXANE RESIN

General use: The following information applies only to the resin component of the two-part kit. After proper mixing

and curing, the product is not hazardous.

Chemical family: Isocyanate-terminated polyurethane prepolymer

MANUFACTURER

ITW Devcon 30 Endicott St. Danvers, MA 01923

EMERGENCY INFORMATION

Emergency telephone number (CHEMTREC): (800) 424-9300

Other Calls: (978) 777-1100

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS CONSTITUENTS

Exposure limits

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Methylene bis(4-cyclohexylisocyanate) (PICM)	PICM	5124301	10-15	0.005 ppm	0.01 ppm (C)	n/e
polypropylene glycol - PICM prepolymer		66101608	60-90	n/e	n/e	n/e
4,4'-Diphenylmethane diisocyanate	MDI	101688	1-5	0.005 ppm	0.02 ppm (C)	0.005 ppm (Canada)
Oligomers of MDI		9016879	1-5	n/e	n/e	.005 ppm (Canada)
Diphenylmethane diisocyanate		26447405	1-5	0.005 ppm	0.02 ppm	n/e
Polyisocyanate based on MDI		*	1-5	n/e	n/e	n/e

[&]quot;TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit."n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance, form, odor: clear liquid with slightly musty odor.

WARNING! Eye, skin and respiratory irritant. May cause skin or respiratory sensitization. May cause lung damage

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Potential health effects

Primary routes of exposure: Skin conta	ct Skin absorption	Eye contact	Inhalation	Ingestion
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Symptoms of acute overexposure:

Skin: Redness, swelling; prolonged contact may cause blistering. May react with skin protein and moisture. **Eyes:** Irritation, reddening, tears. If left untreated, corneal damage can occur and injury is slow to heal.

Inhalation:

Unlikely unless heated or atomized; if so, may cause burning sensation of respiratory tract, cough, shallow breathing, burning sensation, tightness in chest, reduced lung function. Exposures above TLV may lead to bronchitis, bronchial spasm, pulmonary edema, chemical or hypersensitive pneumonitis.

Ingestion:

Could cause irritation and corrosive action of mouth, stomach tissue, and digestive tract (sore throat, abdominal pain, nausea, vomiting, diarrhea).

Effects of chronic overexposure:

Prolonged skin contact may cause blistering of the skin; prolonged eye contact may cause severe eye damage. Prolonged or repeated overexposure may cause skin and/or respiratory sensitization (itching, hives, swellings, and/or asthma-like symptoms) which could occur immediately or delayed. Overexposure to isocyanates has also been reported to cause lung damage (decreased lung function).

Carcinogenicity -- OSHA regulated: No ACGIH: No National Toxicology Program: No

International Agency for Research on Cancer:No

Cancer-suspect constituent(s): None

Medical conditions which may be aggravated by exposure:

Skin allergies, eczema, asthma, and other respiratory disorders (bronchitis, emphysema, bronchial hyperreactivity).

Other effects:

Once sensitized an individual can experience non-specific asthmatic responses upon exposures to dust, cold air, or other irritants.

4. FIRST AID MEASURES

First aid for eves:

Flush with plenty of clear water at low pressure for at least 15 minutes, gently lifting eyelids occassionally. Get medical attention!

First aid for skin:

Remove contaminant and contaminated clothing. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.

First aid for inhalation:

Remove patient to fresh air. Administer oxygen if breathing is difficult. Get medical attention.

First aid for ingestion:

Do NOT induce vomiting; if patient is conscious, give milk or water. Consult a physician immediately.

Note to physician:

EYES: stain for evidence of corneal injury. If corneal is burned, instill antibiotic steroid preparation frequently. Workplace vapors have produced reversible corneal epithelial edema impairing vision. SKIN: treat symptomatically as for contact dermatitis or thermal burns. INGESTION: treat symptomatically. Inducing vomiting is contraindicated because of irritating nature. RESPIRATORY: treat symptomatically. Remove a sensitized individual from exposure to any isocyanate.

5. FIRE FIGHTING MEASURES

ITW Devcon Part No.: 0324 Extinguishing media: Water Carbon dioxide Dry chemical Foam Alcohol foam

Flash Point (°F): 453 Method: PMCC

Explosive limits in air (percent) -- Lower: n/d Upper: n/d

Special firefighting procedures:

Firefighters should wear self-contained breathing apparatus and full protective equipment. Containers exposed to fire may be cooled with water spray.

Unusual fire and explosion hazards:

Extreme heat decomposing polymerized MDI or contamination with water (which reacts with resin, releasing carbon dioxide) could burst closed containers.

Hazardous products of combustion:

Oxides of carbon and nitrogen, traces of HCN and volatilized isocyanates (ie MDI).

6. ACCIDENTAL RELEASE MEASURES

Spill control:

Evacuate and ventilate area. Wear full protective equipment including respiratory equipment. Dike spill to prevent entry into water system. A blanket of protein foam may be placed over spill for temporary control of isocynate vapor.

Containment:

Dike with sawdust or other absorbent.

Cleanup:

Pump large quantities into closed but not sealed container. Absorb small spills with absorbent and shovel into unsealed containers, transport to well-ventilated area (outside) and treat with neutralizing solution (allow to stand 48 hrs uncovered to allow CO2 to escape). Decontaminate residual area with neutralizing solution (allow to stand 15 minutes).

Special procedures:

Neutralizing solution: 90% water, 3-8% concentrated ammonia, 2% detergent; mix 10 parts neutralizer to 1 part isocyanate.

7. HANDLING AND STORAGE

Handling precautions:

Do not breathe aerosols or vapors, material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated lower concentrations. Keep hands away from eyes when handling this material.

Wash thoroughly after using, especially before eating or smoking.

Storage:

Store tightly closed in a cool, dry place (64-86 F). Don't let moisture contaminate this material; it reacts with water to release carbon dioxide, which could build up pressure in closed containers and lead to bursting (do NOT reseal if moisture contamination is suspected).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

Ventilation:

Local exhaust is recommended for confined areas. General mechanical ventilation is adequate for normal use. Ventilation should in any case keep isocyanate concentrations below the TLVs.

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Other engineering controls:

Isocyanate exposure levels must be monitored. Medical supervision of all employees who handle or come in contact with isocyanates is recommended (i.e. FEV, FVC); once sensitized no further exposure can be permitted. Provide safety showers and eye wash stations.

Personal protective equipment

Eye and face protection:

Face shield or splash proof goggles.

Skin protection:

Chemical resistant rubber gloves (butyl rubber, nitrile rubber) and other protective gear as required to prevent skin contact.

Respiratory protection:

None required at normal handling temperatures with adequate ventilation. A positive pressure, supplied air respirator or a self-contained breathing apparatus when concentrations of MDI exceed the TLV.

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity: 1.1 @ 77 F Boiling point (°F): >400 n/d 8.5 MDI

Vapor density (air = 1): Melting point (°F):

Vapor pressure (mmHg): < 10 mm Hg (MDI) at 7 Evaporation rate (butyl acetate = 1): n/d

VOC (grams/liter): Solubility in water: not soluble

Percent volatile by volume: 0 pH (5% solution or slurry in water): n/d

Percent solids by weight: 100

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization may occur.

Conditions to avoid:

Extreme heat or open flame. Moisture.

Incompatible materials:

Alcohols, amines, strong bases, metal compounds and surface active materials; the resin reacts slowly with water to give off carbon dioxide.

Hazardous products of decomposition:

Oxides of carbon and nitrogen, traces of HCN and volatilized isocyanates (MDI).

Conditions under which hazardous polymerization may occur:

Temperatures above 400 F. Moisture.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): >15.8 g/kg

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Exposure:

hours.

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Acute dermal effects: LD50 (rabbit): > 7900 mg/kg

Slight/moderate irritant. Primary dermal irritation scores typically below 3.4/8.0 (Draize). MDI has produced dermal sensitization in several species.

Acute inhalation effects: LC50 (rat): No data available.

Respiratory sensitization response in guinea pigs.

Eye irritation:

Slight irritation. A maximum primary eye irritation score for a polymeric MDI of 12.0/110 (24 hr) was obtained.

Subchronic effects:

Not available.

Carcinogenicity, teratogenicity, and mutagenicity:

Above mentioned chronic study showed pulmonary adenomas (benign tumors) and a single pulmonary adenocarcinoma (malignant tumor) in rats exposed to the 6.0 mg/m3 level. Monomeric MDI is positive in the Ames assay (with hepatic microsomal activation) and negative in an in vivo-invitro micronucleus assay.

Other chronic effects:

Rats exposed to an aerosol of polymeric MDI for 6 hrs/day, 5 days/week, for 2 yrs at concentrations of 0, 0.2, 1.0, and 6.0 mg/m3 revealed effects of irritation to the nasal cavoty and lungs at the 1.0 and 6.0 levels. No Observable Effect Level at 0.2 mg/m3.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Methylene bis(4-cyclohexylisocyanate) (PICM)	9900 mg/kg	10,000 mg/kg	300 mg/m3
polypropylene glycol - PICM prepolymer	n/d	n/d	n/d
4,4'-Diphenylmethane diisocyanate	9200 mg/kg	n/d	178 mg/m^3
Oligomers of MDI	49 gm/kg	>9400 mg/kg	n/d
Diphenylmethane diisocyanate	>15.8 g/kg	>7.9 g/kg	370-490 mg/m3
Polyisocyanate based on MDI	n/d	n/d	n/d

'n/d' = 'not determined'

12 ECOLOGICAL INFORMATION

Ecotoxicity:

LC50 - 24 hr (static): Greater than 500 mg/liter for Daphnia magna, Limnea stagnalis, and Zebra fish (Brachydanio rerio) for both polymeric and monomeric MDI.

Mobility and persistence:

No data.

Environmental fate:

No data.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Waste management recommendations:

If this material becomes a waste, it would not be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state, and local regulations. Incineration is the preferred method.

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14. TRANSPORT INFORMATION

Proper shipping name: Non-regulated

Technical name : N/A
Hazard class : N/A
UN number: N/A
Packing group: N/A

Emergency Response Guide no.: N/A

IMDG page number: N/A
Other: N/A

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

None

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Methylene bis(4-cyclohexylisocyanate) (PICM)	No	Yes	0.0	Not required
polypropylene glycol - PICM prepolymer	No	No	0.0	Not required
4,4'-Diphenylmethane diisocyanate	No	Yes	5000.0	Not required
Oligomers of MDI	No	No	0.0	Not required
Diphenylmethane diisocyanate	No	No	0.0	Not required
Polyisocyanate based on MDI	No	No	0.0	Not required

^{*}Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard -- Delayed health hazard -- Reactivity hazard --

Canadian regulations

^{**}Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of

Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

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WHMIS hazard class(es): D2A; D2B

All components of this product are on the Domestic Substances List.

16. OTHER INFORMATION

Hazardous Materials Identification System (HMIS) ratings:	Health	Flammability	Reactivity

Revisions for this issue:

MSDS section	Revisions
2	Reformulated

The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.