



# SAFETY DATA SHEET - SDS

Dynamo Polyurethane Systems - Dynamo 500 Series  
Resin Component B - Part B



## SECTION 1 : IDENTIFICATION

### 1.1. Identification

Product form : Mixtures

Chemical Name : Polyurethane Resin B - Side

Product Type : Liquid

Identified Use : Component B of Spray - Applied System

Cas No. : Mixture

Product name : Dynamo 500, Dynamo D5, Dynamo 50, Dynamo 450, CG 50, and CG 500

### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : A component for the production of high pressure spray foam insulation

### 1.3. Supplier

Dynamo Polyurethane Systems Inc.  
2113 Harwood Rd.  
Ste 309 #900  
Bedford, TX 76021  
Tel: 469-799-9991  
info@Dynamosp.com

### 1.4. Emergency telephone number

Emergency number : CHEMTREC (24 hours) 800-424-9300  
International (24 hours) +1-703-527-3887

## SECTION 2 : HAZARD(S) IDENTIFICATION

### 2.1. Classification of the substance or mixture

#### GHS-US classification

Acute toxicity (oral), Category 4	H302	Harmful if swallowed
Skin corrosion/irritation, Category 1B	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage



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Full text of H statements: see section 16

## 2.2. GHS LABEL ELEMENTS

### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US)	:	Danger
Hazard statements (GHS-US)	:	H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H318 Causes serious eye damage.

Precautionary statements (GHS-US)	:	P260 - Do not breathe fume, mist, spray, vapors P264 - Wash hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product P280 - Wear respiratory protection, protective clothing, protective gloves, eye protection P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower 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 P310 - Immediately call a doctor, a POISON CENTER P330 - Rinse mouth P363 - Wash contaminated clothing before reuse P405 - Store locked up P501 - Dispose of contents/container to comply with applicable local, national and international regulation.
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## 2.3. Other hazards which do not result in classification



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No additional information available

2.4. Unknown acute toxicity (GHS US)  
Not applicable

Not applicable

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Ingredient Name	Cas #	Concentration	Exposure	LimitsLD50/LC50
Dimethylamino-ethoxyethanol	108-01-0	1%-5%	Not available	2337mg/kg (rat-oral)/ 1000mg/l 4hr (rat inhalation)
1,3-Propane diamine N'-(3-(dimethylamino-propyl)-N,N-dimethyl	6711-48-4	1%- 5%	Not available	> 1.25g/kg (rat-oral)/ Not determined

## Section 4 : FIRST AID MEASURES

Eye contact : Rinse immediately with plenty of water for 15 minutes. Contact lenses should be removed. Immediately get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. Get medical advice/attention if you feel unwell.

Skin contact : Remove contaminated clothing immediately. Wash skin thoroughly with mild soap and water. Seek medical attention immediately.

Ingestion : Rinse mouth immediately and drink plenty of water. Induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in the recovery position and seek medical advice. Get medical advice/attention if you feel unwell.

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

After inhalation : May be harmful if inhaled. Prolonged exposure to liquid may cause a mild irritation.

After skin contact : Causes severe skin burns.

After eye contact : Causes serious eye damage.



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After ingestion : Harmful if swallowed. May cause stomach pain or discomfort and gastrointestinal disturbance.

## 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician : Treat symptomatically.  
Protection of first aiders : No action shall be taken involving any personal risk or without suitable training. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

## SECTION 5 : FIRE FIGHTING MEASURES

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water. Dry extinguishing powder. Carbon dioxide. Alcohol resistant foam.

Unsuitable extinguishing media : None known.

### 5.2. Specific hazards arising from the chemical

Fire hazard : Minimal fire hazard. Combustion may produce irritating fumes and carbon oxides.

Explosion hazard : None known.

Specific hazards arising from the chemical : Carbon dioxide, carbon monoxide, oxides of nitrogen, dense black smoke. Burning produces irritant fumes.

Reactivity : Stable under normal conditions of use.

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

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk without suitable training. Fire fighters should wear appropriate protective equipment and self contained breathing apparatus with a full face piece operated in positive pressure mode. Move undamaged containers from immediate hazard area if it can be done safely.

Other information : Prevent entry to sewers and public waters.



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## SECTION 6 : Accidental release measures

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

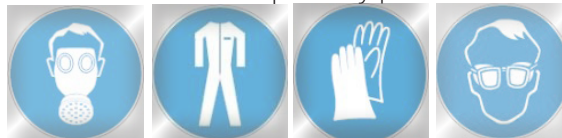
- 6.1.1. Spill Procedure : Clean up personnel must wear protective equipment to prevent contact with the product. Evacuate the area of all unnecessary personnel. Stop spill at source. Use inert absorbent material such as sand, clay, earth or floor absorbent to clean up spill. Shovel into drums.
- 6.1.2. Personal Precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Wear personal protection equipment. Remove persons to safety. Do not breathe vapors or spray mist.
- 6.2. Methods and material for containment and cleaning up : Suitable material for taking up: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Wash with plenty of water.
- 6.3. Environmental precautions: Prevent entry to sewers and public waters.

## SECTION 7 : Handling and storage

- 7.1. Precautions for safe handling : Avoid mixing with air or use for any purpose above atmospheric pressure. If possible use nitrogen (under pressure) to carry out transfers. No special fire protection measures are necessary.
- 7.2. Hygiene measures : Wash contaminated clothing prior to re-use. Always wash hands and face immediately after handling this product, and once again before leaving the workplace. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.
- 7.3. Conditions for safe storage : Store product in accordance with local regulation. Store product at room temperature away from heat and moisture. Store product in original container in a dry, cool, and well ventilated area with local exhaust. Protect from freezing.
- 7.4. Incompatible materials : Strong oxidizing agents. Strong acid. Strong bases.
- 7.5. Storage temperature : 50 -90°F ( 10 - 32°C )

## SECTION 8 : Exposure controls/personal protection

- 8.1. Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of controls dust, fume, vapor, etc) below recommended exposure limits. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not breathe dust/fume/gas/mist/vapors.
- 8.3. Individual protection Measures Eye Protection : When directly handling liquid product, eye protection is required, such as chemical safety goggles or chemical safety goggles in combination with a full-face shield when there is a greater risk of splash.
- 8.4. Hand protection : Impervious gloves e.g. PVC, nitrile rubber, butyl rubber
- 8.5. Skin and body protection : Long sleeved protective clothing. Chemical resistant apron
- 8.6. Respiratory protection : Spraying increases the risk of hazardous exposure. In atmospheres where the material is sprayed, workers should avoid contact with aerosols through proper engineering controls such as exhaust ventilation and proper protective equipment such as a full face air supplied respirators. NIOSH/MSHA approved air purifying respirator should be used if operating conditions produce airborne concentrations that exceed exposure limits for any individual components.
- 8.7. Hygiene Measures : Wash hands, forearms and face thoroughly after handling chemical products.
- 8.8. Personal Protective Equipment(PPE) : Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.



**SECTION 9 : Physical and chemical properties**

**9.1. Physical and chemical properties**

- Color : Milky white / Brown
- Odor : Light ammonia
- Odor Threshold (ppm) : Not available.



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pH (Value)	:	~11.0
Melting Point (°C) / Freezing Point (°C)	:	0 °C/32 °F
Initial boiling point	:	212 °C/413 °F
Flash Point (°C)	:	Not applicable
Evaporation Rate	:	Not available
Flammability (solid, gas)	:	Not applicable
Explosive Limit Ranges	:	Not available
Vapour pressure (Pascal)	:	Not available
Vapour Density (Air=1)	:	Not available
Density (g/ml)	:	Not available
Specific Gravity @ 77°F (25°C)	:	Summer formula – 1.15 g/cm <sup>3</sup> / .415 lb/in <sup>3</sup>
Volatility	:	Not available
Viscosity	:	500-100cps @ 20 °C/68 °F
Oxidizing properties	:	No data available

## 9.2. Other information

No additional information available

## SECTION 10 : Stability and reactivity

- |  |   |  |
|--|---|--|
| 10.1. Reactivity                           | : | Stable under normal conditions of use.   |
| 10.2. Chemical stability                   | : | Stable under normal conditions of use.   |
| 10.3. Possibility of Hazardous Reactions   | : | Not available  |
| 10.4. Incomparability (Materials to avoid) | : | Reacts with strong oxidizing agents. Strong acids. Strong bases.   |
| 10.5. Conditions to Avoid                  | : | High temperatures, open flames and sparks. Do not use in areas with out adequate ventilation. Temperatures > 85 °F(29 °C). Protect from moisture. Direct sunlight. Excessive heat. Freezing. |
| 10.6. Hazardous Polymerization             | : | Polymerization will occur in contact with isocyanates.   |
| 10.7. Hazardous decomposition              | : | Combustion may produce irritating fumes and carbon oxides. Oxides of nitrogen and carbon. Other potentially toxic fumes.   |



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## SECTION 11 : Toxicological information

### 11.1. Information on toxicological effects

11.1.1 Exposure routes: Inhalation, Skin Contact, Eye Contact

11.1.2 Acute Toxicity :

Ingredient Name	LC50	LD50	LD50
,3 Propanediamine, N'(3-dimethylamino)propyl) N,Ndimethyl-	Not available	1620ug/kg oral, rat	Not available
Dimethylaminoethanol 2-	6.1mg/L 4 hours, (inhalation, rat)	1803mg/kg Oral, rat	Not available

11.2. Irritation : Skin Irritation: Causes severe skin burns. Eye Irritant: Causes serious eye damage.

11.3. Sensitization : Skin Sensitization: Not expected to be a skin or respiratory sensitizer.

11.4. Repeated dose toxicity : No information available

11.5. Carcinogenicity : No ingredients are listed as carcinogens by ACGIH and IRAC.

11.6. Mutagenicity : No information available

## SECTION 12 : Ecological information

12.1. Ecotoxicity : Not available.

12.2. Persistence and Degradability: Not expected to be rapidly biodegradable.

12.3. Mobility in Soil : Not available

12.4. Bioaccumulative Potential : Not available.

Other adverse effects : Not available





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## SECTION 13 : Disposal considerations

### 13.1. Disposal methods

- Waste treatment methods : Dispose of this material and its container to hazardous or special waste collection point.
- Product/Packaging disposal : Comply with Federal, provincial, and local regulations on reporting releases. Consult your local or regional authorities.
- Ecology - waste materials : Avoid release to the environment.

## SECTION 14 : Transport information

Department of Transportation (DOT) :  
In accordance with DOT  
Not regulated

Transportation of Dangerous Goods  
Not regulated

Air transport  
Not regulated

Transport by sea  
Not regulated

## 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

This product or mixture is not known to contain a toxic chemical (s) in excess of the applicable inconsequential concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

15.2. SARA 302 Extremely Hazardous Substances : NONE

15.3. Chemicals subject to SARA Reporting : NONE



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This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

### SECTION 16: Other information

- 16.1. Other information : The attention of the user is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended
- 16.2. H-statement(s) :  
H302 Harmful if swallowed  
H312 Harmful in contact with skin  
H314 Causes severe skin burns and eye damage  
H315 Causes skin irritation  
H318 Causes serious eye damage  
H319 Causes serious eye irritation  
H331 Toxic if inhaled  
H332 Harmful if inhaled
- 16.3. Safety Data Sheet issued by Product Safety Department : This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Dynamo Polyurethane Systems Inc. Dynamo Polyurethane Systems Inc. assumes no legal responsibility for use or reliance upon this data. It is the user's responsibility to ensure that their activities comply with federal, state, or local laws.
- Date of Issue : January 2023
- Additional Information : NONE