

Safety Data Sheet

Issue Date: 01-Jan-2007

Revision Date: 09-Mar-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name DYNA-XXV

Other means of identification

SDS # DYNI-005

Recommended use of the chemical and restrictions on use

Recommended Use Acrylate Copolymer.

Details of the supplier of the safety data sheet

Supplier Address

Dynasol, Inc
330 Pine St.
Canton, MA 02021

Emergency Telephone Number

Company Phone Number

Phone: (781) 821-8888

Fax: (781) 575-9177

Emergency Telephone (24 hr)

INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear or translucent liquid

Physical State Liquid

Odor Mild

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

Other Hazards

Harmful to aquatic life with long lasting effects
Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
tributoxyethyl phosphate	78-51-3	1-5
Zinc Oxide	1314-13-2	<1
Ammonium hydroxide	1336-21-6	<1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice

Provide this SDS to medical personnel for treatment. If exposed or concerned: Get medical advice/attention.

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects

Symptoms	Ingestion may cause nausea. Direct contact may cause skin or eye irritation. Prolonged exposure may produce headaches and mucous membrane irritation.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Hazardous Combustion Products Toxic gases may be released.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required.
Environmental Precautions	See Section 12 for additional Ecological Information. Prevent entry into drains, sewers and other waterways.

Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Absorb with inert material, and then place in suitable container for chemical waste.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. For industrial or professional use only. Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
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Conditions for safe storage, including any incompatibilities

- Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep storage temperature between 4-32 °C (40-90 °F).
- Incompatible Materials** Materials incompatible with water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc Oxide 1314-13-2	STEL: 10 mg/m ³ respirable fraction TWA: 2 mg/m ³ respirable fraction	TWA: 5 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ fume (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) STEL: 10 mg/m ³ fume (vacated)	IDLH: 500 mg/m ³ Ceiling: 15 mg/m ³ dust TWA: 5 mg/m ³ dust and fume STEL: 10 mg/m ³ fume

Appropriate engineering controls

- Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

- Eye/Face Protection** Safety goggles are recommended.
- Skin and Body Protection** Rubber gloves recommended.
- Respiratory Protection** Respiratory protection is recommended where exposure limits are exceeded.
- General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Mild
Appearance	Clear or translucent liquid	Odor Threshold	Not determined
Color	Clear or translucent		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7.0-9.5	
Melting Point/Freezing Point	Variable	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	> 121 °C / 250 °F	
Evaporation Rate	1	(Water = 1)
Flammability (Solid, Gas)	Liquid-Not Applicable	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	1	(Water Vapor=1)
Specific Gravity	Variable	
Water Solubility	Infinitely miscible	
Solubility in other solvents	Not determined	
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>

Partition Coefficient	Not determined
Auto-ignition Temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Temperatures of 212°F or above will boil water away.

Incompatible Materials

Materials incompatible with water.

Hazardous Decomposition Products

Thermal decomposition may produce toxic vapor or gas.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	May cause eye irritation on direct contact.
Skin Contact	Direct contact may cause skin irritation.
Inhalation	Prolonged exposure may produce headaches and mucous membrane irritation.
Ingestion	Nausea may occur.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Di(ethylene glycol) ethyl ether 111-90-0	= 1920 mg/kg (Rat)	= 4200 µL/kg (Rabbit) = 6 mL/kg (Rat)	> 5240 mg/m ³ (Rat) 4 h
tributoxyethyl phosphate 78-51-3	= 3000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 6.4 mg/L (Rat) 4 h
Zinc Oxide 1314-13-2	> 5000 mg/kg (Rat)	-	-
Ammonium hydroxide 1336-21-6	= 350 mg/kg (Rat)	-	-
Propylene Glycol Phenyl Ether 770-35-4	= 2830 mg/kg (Rat)	> 2 g/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Carcinogenicity**

Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Di(ethylene glycol) ethyl ether 111-90-0		11400 - 15700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 11600 - 16700: 96 h Pimephales promelas mg/L LC50 flow- through 10000: 96 h Lepomis macrochirus mg/L LC50 static 19100 - 23900: 96 h Lepomis macrochirus mg/L LC50 flow-through 13400: 96 h Salmo gairdneri mg/L LC50 flow-through		3940 - 4670: 48 h Daphnia magna mg/L EC50
tributoxyethyl phosphate 78-51-3		10.4 - 12.0: 96 h Pimephales promelas mg/L LC50 flow- through		
Ammonium hydroxide 1336-21-6		8.2: 96 h Pimephales promelas mg/L LC50		0.66: 48 h water flea mg/L EC50 0.66: 48 h Daphnia pulex mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Di(ethylene glycol) ethyl ether 111-90-0	-0.8
tributoxyethyl phosphate 78-51-3	4.78

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

- Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.
- Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Zinc Oxide 1314-13-2	Toxic
Ammonium hydroxide 1336-21-6	Toxic Corrosive

14. TRANSPORT INFORMATION

- Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
- DOT** Not regulated
- IATA** Not regulated
- IMDG** Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
tributoxyethyl phosphate	Present	X		Present		Present	X	Present	X	X
Zinc Oxide	Present	X		Present		Present	X	Present	X	X
Ammonium hydroxide	Present	X		Present		Present	X	Present	X	X

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ammonium hydroxide 1336-21-6	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Di(ethylene glycol) ethyl ether - 111-90-0	111-90-0	5-10	1.0
Zinc Oxide - 1314-13-2	1314-13-2	<1	1.0
Ammonium hydroxide - 1336-21-6	1336-21-6	<1	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc Oxide		X		
Ammonium hydroxide	1000 lb			X

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Di(ethylene glycol) ethyl ether 111-90-0	X		X
Zinc Oxide 1314-13-2	X	X	X
Ammonium hydroxide 1336-21-6	X	X	X

16. OTHER INFORMATION**NFPA****Health Hazards**

1

Flammability

0

Instability

0

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical Hazards

Not determined

Personal Protection

Not determined

Issue Date:

01-Jan-2007

Revision Date:

09-Mar-2015

Revision Note:

New format

Disclaimer

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.

End of Safety Data Sheet