



Safety Data Sheet

Dow Chemical Company Ltd

Product Name: POLYOX(TM) WSR N3000

Revision Date: 2011/06/13

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Dow Chemical Company Ltd encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

Section 1. Identification of the substance/preparation and of the company/undertaking

1.1 Product identifiers

Product Name

POLYOX™ WSR N3000

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Thickener. Binder. Lubricant. Processing aid.

1.3 Details of the supplier of the safety data sheet

COMPANY IDENTIFICATION

Dow Chemical Company Ltd
Diamond House, Lotus Park
Kingsbury Crescent
TW18 3AG Staines, Middlesex
United Kingdom

Customer Information Number:

0203 139 4000

SDSQuestion@dow.com

1.4 EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact:

0031 115 694 982

Local Emergency Contact:

00 31 115 69 4982

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification - REGULATION (EC) No 1272/2008

This product is not classified as dangerous according to EC criteria.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

This product is not classified as dangerous according to EC criteria.

Additional Information

Safety data sheet available for professional users on request.

2.2 Label elements**Labelling - REGULATION (EC) No 1272/2008**

This product is not classified as dangerous according to EC criteria.

2.3 Other Hazards

Slipping hazard.

May form explosive dust-air mixture.

Section 3. Composition/information on ingredients
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3.2 Mixture

This product is a mixture.

CAS-No. / EC-No. / Index	REACH No.	Amount	Component	Classification: REGULATION (EC) No 1272/2008
CAS-No. 25322-68-3 EC-No. Polymer	—	>= 95.0 %	Poly(ethylene oxide)#	Not classified
CAS-No. 112945-52-5 EC-No. not applicable	—	<= 3.0 %	Fumed silica (generic)#	Not classified
CAS-No. Not available EC-No. Not available	—	<= 1.0 %	Calcium as mixed salts##	Not classified

CAS-No. / EC-No. / Index	Amount	Component	Classification: 67/548/EEC
CAS-No. 25322-68-3 EC-No. Polymer	>= 95.0 %	Poly(ethylene oxide)#	Not classified.
CAS-No. 112945-52-5 EC-No. not applicable	<= 3.0 %	Fumed silica (generic)#	Not classified.
CAS-No. Not available EC-No. Not available	<= 1.0 %	Calcium as mixed salts##	Not classified.

Substance(s) with an Occupational Exposure Limit.

Voluntarily disclosed component(s).

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4. First-aid measures

4.1 Description of first aid measures

General advice: If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: No emergency medical treatment necessary.

Skin Contact: Wash skin with plenty of water.

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

4.3 Indication of immediate medical attention and special treatment needed

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5. Fire Fighting Measures

5.1 Extinguishing Media

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Do not permit dust to accumulate. When suspended in air dust can pose an explosion hazard. Minimize ignition sources. If dust layers are exposed to elevated temperatures, spontaneous combustion may occur. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge.

5.3 Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Dust explosion hazard may result from forceful application of fire extinguishing agents. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause a slipping

hazard. Material becomes slippery when wet. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.

6.2 Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

6.3 Methods and materials for containment and cleaning up: Contain spilled material if possible. Collect with vacuum equipment. Collect in suitable and properly labeled containers. Attempt to neutralize by adding materials such as Soda ash. See Section 13, Disposal Considerations, for additional information.

Section 7. Handling and Storage

7.1 Precautions for safe handling

Handling

General Handling: Avoid contact with eyes. Wash thoroughly after handling. No smoking, open flames or sources of ignition in handling and storage area. Good housekeeping and controlling of dusts are necessary for safe handling of product. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Keep away from heat, sparks and flame. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Store in accordance with good manufacturing practices. See Section 10 for more specific information.

7.3 Specific end uses

See the technical data sheet on this product for further information.

Section 8. Exposure Controls / Personal Protection

8.1 Control parameters

Exposure Limits

Component	List	Type	Value
Poly(ethylene oxide)	AIHA WEEL	TWA Particulate.	10 mg/m ³
Fumed silica (generic)	Ireland OELV	TWA Respirable dust.	2.4 mg/m ³
	Ireland OELV	TWA Total inhalable dust.	6 mg/m ³
	UK WEL	TWA Inhalable dust.	6 mg/m ³
	UK WEL	TWA Respirable dust.	2.4 mg/m ³

8.2 Exposure controls

Personal Protection

Eye/Face Protection: Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent.

Skin Protection: No precautions other than clean body-covering clothing should be needed.

Hand protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Particulate filter, type P2.

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.

Section 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance

Physical State	Powder
Color	White to off-white
Odor	Ammoniacal
Odor Threshold	No test data available
pH	Not applicable
Melting Point	No test data available
Freezing Point	Not applicable
Boiling Point (760 mmHg)	Not applicable.
Flash Point - Closed Cup	No test data available
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammability (solid, gas)	No
Flammable Limits In Air	Lower: No test data available Upper: No test data available

Vapor Pressure	No test data available
Vapor Density (air = 1)	No test data available
Specific Gravity (H ₂ O = 1)	No test data available
Solubility in water (by weight)	infinite
Partition coefficient, n-octanol/water (log Pow)	No data available for this product.
Autoignition Temperature	280 - 330 °C <i>Literature</i>
Decomposition Temperature	No test data available
Kinematic Viscosity	Not applicable
Explosive properties	
Oxidizing properties	

9.2 Other information

Molecular Weight	No test data available
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Section 10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Thermally stable at typical use temperatures.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to Avoid: Avoid contact with air (oxygen). Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems. Avoid static discharge. Avoid moisture. Avoid direct sunlight or ultraviolet sources.

10.5 Incompatible Materials: Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

10.6 Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials.

Decomposition products can include and are not limited to: Carbon dioxide. Alcohols. Ethers.

Hydrocarbons. Ketones. Polymer fragments.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity

Ingestion

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Typical for this family of materials. Estimated. LD50, Rat > 4,000 mg/kg

Aspiration hazard

Based on physical properties, not likely to be an aspiration hazard.

Dermal

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Typical for this family of materials. Estimated. LD50, Rabbit > 5,000 mg/kg

Inhalation

No adverse effects are anticipated from inhalation. For respiratory irritation and narcotic effects: No specific, relevant data available for assessment.

As product: The LC50 has not been determined.

Eye damage/eye irritation

May cause slight eye irritation. Corneal injury is unlikely.

Skin corrosion/irritation

Essentially nonirritating to skin.

Sensitization

Skin

Did not cause allergic skin reactions when tested in guinea pigs.

Respiratory

No relevant data found.

Repeated Dose Toxicity

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Chronic Toxicity and Carcinogenicity

Did not cause cancer in laboratory animals.

Developmental Toxicity

For the major component(s): Did not cause birth defects or any other fetal effects in laboratory animals.

Reproductive Toxicity

In animal studies, did not interfere with reproduction.

Genetic Toxicology

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Component Toxicology - Poly(ethylene oxide)

Inhalation

Typical for this family of materials. No deaths occurred at this concentration. LC50, 6 h, Aerosol, Rat > 2.5 mg/l

Section 12. Ecological Information

12.1 Toxicity

Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).

Fish Acute & Prolonged Toxicity

LC50, fathead minnow (Pimephales promelas), static, 96 h: > 1,000 mg/l

Aquatic Invertebrate Acute Toxicity

LC50, water flea Daphnia magna, static, 48 h, survival: > 100 mg/l

Toxicity to Micro-organisms

IC50; bacteria, 16 h: > 5,000 mg/l

12.2 Persistence and Degradability

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
4.1 - 19.9 %	28 d	OECD 301B Test	fail

12.3 Bioaccumulative potential

Bioaccumulation: For this family of materials: No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

12.4 Mobility in soil

Mobility in soil: No relevant data found.

12.5 Results of PBT and vPvB assessment

This mixture has not been assessed for persistence, bioaccumulation and toxicity (PBT).

12.6 Other adverse effects

No relevant data found.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water.

Section 14. Transport Information

ROAD & RAIL

NOT REGULATED

ROAD & RAIL

NOT REGULATED

OCEAN

NOT REGULATED

AIR

NOT REGULATED

INLAND WATERWAYS

NOT REGULATED

Section 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**European Inventory of Existing Commercial Chemical Substances (EINECS)**

The components of this product are on the EINECS inventory or are exempt from inventory requirements.

15.2 Chemical Safety Assessment

Section 16. Other Information

Hazard statement in the composition section**Revision**

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Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Dow Chemical Company Ltd urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.