

## Safety Data Sheet

### VORANOL™ 232-034 Polyol

Version 1.2

Revision Date: 12/14/2020

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** : VORANOL™ 232-034 Polyol

#### Recommended use of the chemical and restrictions on use

Recommended use : Industrial chemical

#### Supplier or Repackaging Details

**Company** : Univar Solutions México, S. de R.L. de C.V.  
**Address** : Av. Xola, número 535, piso 2, Col. Del Valle Norte  
Deleg. Benito Juárez CP 03103  
Ciudad de México  
Mexico

**Manufactured By** : The Dow Chemical Company

#### Emergency telephone number:

Transport North America: CHEMTREC (1-800-424-9300)  
CHEMTREC INTERNATIONAL Tel # 703-527-3887  
SETIQ 800 00 214 00 / 55 55 59 15 88

**Additional Information:** : Responsible Party: Product Compliance Department  
E-Mail: SDSLA@univarsolutions.com  
SDS Requests: 55 1107 0170  
Website: www.univarsolutions.com

#### SECTION 2. HAZARDS IDENTIFICATION

##### GHS Classification

Not a hazardous substance or mixture.

##### GHS label elements

Not a hazardous substance or mixture.

##### Other hazards

None known.

**This SDS was prepared according to NOM-018-STPS-2015.**

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

##### Hazardous components

No hazardous ingredients

#### SECTION 4. FIRST AID MEASURES

General advice : Do not leave the victim unattended.  
If inhaled : Move to fresh air.  
If symptoms persist, call a physician.  
In case of skin contact : Wash off with plenty of water.  
If skin irritation persists, call a physician.  
In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.  
Remove contact lenses.  
If eye irritation persists, consult a specialist.

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If swallowed	: Obtain medical attention. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
Most important symptoms and effects, both acute and delayed	: None known.

**SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO <sub>2</sub> ) Dry chemical Water spray
Unsuitable extinguishing media	: High volume water jet
Hazardous combustion products	: No hazardous combustion products are known
Specific extinguishing methods	: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Methods and materials for containment and cleaning up	: Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.
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**SECTION 7. HANDLING AND STORAGE**

Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Advice on safe handling	: For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.
Hygiene measures	: General industrial hygiene practice.
Conditions for safe storage	: Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	: No materials to be especially mentioned.
Recommended storage temperature	: 15 - 35 °C
Storage period	: 24 Months

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

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Contains no substances with occupational exposure limit values.

#### Personal protective equipment

Respiratory protection	:	No personal respiratory protective equipment normally required. In the case of vapour formation use a respirator with an approved filter.
Eye protection	:	Safety glasses
Skin and body protection	:	Protective suit

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#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	Clear, Colorless
Odour	:	sweet
Odour Threshold	:	No data available
pH	:	7
Freezing point (Pour point)	:	-29 °C (-20 °F)
Boiling point (Boiling point/boiling range)	:	> 100 °C (> 212 °F) (1013 hPa)
Flash point	:	182 °C (360 °F)
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	> 1 @ 20 - 25 °C (68 - 77 °F)
Relative density	:	1.018 @ 25 °C (77 °F) Reference substance: (water = 1)
Density	:	1.018 g/cm <sup>3</sup> @ 25 °C (77 °F)
Solubility(ies)		
Water solubility	:	slightly soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Thermal decomposition	:	No data available
Viscosity		
Viscosity, kinematic	:	415 - 455 mm <sup>2</sup> /s @ 37.8 °C (100.0 °F) Method: ASTM D 445

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#### SECTION 10. STABILITY AND REACTIVITY

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Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	elevated temperatures Possible emission of gaseous decomposition products may lead to a dangerous pressure build-up.
Incompatible materials	:	No data available
Hazardous decomposition products	:	Carbon dioxide (CO <sub>2</sub> ) Alcohols ketones Hydrocarbons ethers

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**SECTION 11. TOXICOLOGICAL INFORMATION****Further information****Product:**

Remarks: No data available

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects****Product:**

Additional ecological information : No data available

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.

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For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-909-4897

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

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**SECTION 14. TRANSPORT INFORMATION**

**DOT (Department of Transportation):** Not regulated as a dangerous good

**MX-DG(Mexico Road Transportation):** Not regulated as a dangerous good

**IATA (International Air Transport Association):** Not regulated as a dangerous good

**IMDG (International Maritime Dangerous Goods):** Not regulated as a dangerous good

**Special precautions for user**

Not applicable

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**SECTION 15. REGULATORY INFORMATION****The components of this product are reported in the following inventories:**

TSCA : On TSCA Inventory

DSL : not determined

AICS : not determined

NZIoC : not determined

ENCS : not determined

KECI : not determined

PICCS : not determined

IECSC : not determined

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**SECTION 16. OTHER INFORMATION****Further information**

Other information : The information accumulated is based on the data of

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which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (55 1107 0170) [SDSLA@univarsolutions.com](mailto:SDSLA@univarsolutions.com).

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.

#### Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances

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MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50			Lethal Concentration 50%