1. Identification

Product identifier used on the label

ENERTITE G RESIN

Recommended use of the chemical and restriction on use
Recommended use*: polyurethane component; industrial chemicals
Suitable for use in industrial sector: Polymers industry; chemical industry

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification
Chemical family: resin
Synonyms: Urethane System Resin Component

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Skin Corr./Irrit.	1B	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
STOT RE	2 (oral)	Specific target organ toxicity — repeated exposure
Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:

H373	May cause damage to organs (Kidney) through prolonged or repeated exposure (oral).
H314	Causes severe skin burns and eye damage.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.
P260	Do not breathe dust/gas/mist/vapours.
P264	Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

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 POISON CENTER or doctor/physician.
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.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Precautionary Statements (Storage):

P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Weight %	Chemical name
13674-84-5	>= 15.0 - < 20.0%	tris(2-chloro-1-methylethyl)phosphate
127087-87-0	>= 5.0 - < 15.0%	4-Nonylphenol, branched, ethoxylated
2212-32-0	>= 5.0 - < 7.0%	2-((2-(dimethylamino)ethyl)methylamino)ethanol
6711-48-4	>= 3.0 - < 5.0%	N'-(3-(dimethylamino)propyl)-N,N-dimethylpropane-1,3-diamine
111-46-6	>= 1.0 - < 3.0%	diethylene glycol

83016-70-0	>= 1.0 - < 3.0%	2-((2-(2-(dimethyl amino)ethoxy)ethyl)methyl amino)ethanol
9046-10-0	>= 0.3 - < 1.0%	alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)- poly(oxy(methyl-1,2-ethanediyl))

4. First-Aid Measures

Description of first aid measures

General advice:
First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin:
Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

If in eyes:
Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:
Do not induce vomiting. Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.
Information on: diethylene glycol
Symptoms: Overexposure may cause:, vomiting, coma, abdominal cramps, lethargy, nausea, diarrhea, headache
Information on: tris(2-chloro-1-methylethyl)phosphate
Symptoms: Overexposure may cause:, convulsions, depression, hypoxemia, tremors
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Hazards: No hazards anticipated.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, carbon dioxide, foam

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
No particular hazards known.

Advice for fire-fighters
Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Further accidental release measures:
High risk of slipping due to leakage/spillage of product.

Personal precautions, protective equipment and emergency procedures
Use personal protective clothing.

Environmental precautions
Do not empty into drains. Do not discharge into the subsoil/soil.

Methods and material for containment and cleaning up
Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling
Ensure thorough ventilation of stores and work areas. Protect against moisture.

Protection against fire and explosion:
No special precautions necessary.

Conditions for safe storage, including any incompatibilities
Segregate from foods and animal feeds. Segregate from acids. Segregate from oxidants.

Suitable materials for containers: Carbon steel (Iron), High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4301 (V2)

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

Storage stability:
Storage temperature: 16 - 27 °C
Protect against moisture.
The stated storage temperature is noted for health and safety in the workplace. With regard to Quality, please refer to the product specific Technical Bulletin.

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Advice on system design:
Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

Body protection:
Standard work clothes and shoes.

General safety and hygiene measures:
Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapours/mists. Wash soiled clothing immediately.

9. Physical and Chemical Properties

Form:	liquid	
Odour:	amine-like	
Odour threshold:	No applicable information available.	
Colour:	yellow	
pH value:	9.5	
Melting point:	0.00 °C	
Boiling point:	100.00 °C	
Sublimation point:	No applicable information available.	
Flash point:	> 200.00 °F	(closed cup)
Flammability:	not flammable	
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	> 250 °C	
Vapour pressure:	< 0.1 hPa (25 °C)	
Density:	1.0000 g/cm3 (20.00 °C)	
Relative density:	No applicable information available.	
Vapour density:	No applicable information available.	
Partitioning coefficient n-octanol/water (log Pow):	Unspecified	
Self-ignition temperature:	not self-igniting	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	350.000 mPa.s (25.00 °C)	
Viscosity, kinematic:	No applicable information available.	

Solubility in water:	slightly soluble
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:
No corrosive effect on metal.

Oxidizing properties:
Not an oxidizer.

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid
Temperature: < 0 degrees Celsius

Incompatible materials
acids, oxidizing agents, isocyanates

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen cyanide

Thermal decomposition:
No decomposition if stored and handled as prescribed/indicated.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Oral
Type of value: ATE
Value: 2,737 mg/kg

Inhalation
No applicable information available.

Dermal
No applicable information available.

Assessment other acute effects
Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Origin of data: expert judgement

Irritation / corrosion
Assessment of irritating effects: Corrosive! Damages skin and eyes. May cause severe damage to the eyes.

Sensitization
Assessment of sensitization: The chemical structure does not suggest a sensitizing effect. No applicable information available.

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: Repeated exposure may affect certain organs.

Genetic toxicity
Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Carcinogenicity
Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Reproductive toxicity
Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Teratogenicity
Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Other Information
The product has not been tested. The statement has been derived from the properties of the individual components.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Medical conditions aggravated by overexposure
Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
Acutely harmful for aquatic organisms. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Toxicity to fish

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)- poly(oxy(methyl-1,2-ethanediyl))
LC50 (96 h) > 15 mg/l, Oncorhynchus mykiss (OECD Guideline 203, semistatic)
The details of the toxic effect relate to the nominal concentration. Limit concentration test only (LIMIT test).
LC50 (96 h) 772.14 mg/l, Cyprinodon variegatus (OECD Guideline 203, static)
The details of the toxic effect relate to the nominal concentration.

Information on: Brominated aromatic diol
LC50 (96 h) 12 mg/l, Lepomis macrochirus (other)

Information on: 2-Propanol, 1-chloro-, phosphate (3:1)
LC50 (96 h) 51 mg/l, Pimephales promelas (Fish test acute, static)
LC50 (96 h) 56 mg/l, Brachydanio rerio (Fish test acute, static)

Information on: N'-(3-(dimethylamino)propyl)-N,N-dimethylpropane-1,3-diamine
LC50 (96 h) > 21.5 - < 46.4 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 84/449/EEC, C.1, static)
The statement of the toxic effect relates to the analytically determined concentration. The product will cause changes in the pH value of the test system. The result refers to an unneutralized sample. After neutralization no appreciable reduction in harmful effect can be observed.

Aquatic invertebrates

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)- poly(oxy(methyl-1,2-ethanediyl))
EC50 (48 h) 80 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
The details of the toxic effect relate to the nominal concentration.
EC50 (48 h) 418.34 mg/l, Arcatia tonsa (Daphnia test acute, static)
The details of the toxic effect relate to the nominal concentration.

Information on: 2-Propanol, 1-chloro-, phosphate (3:1)
EC50 (48 h) 131 mg/l, Daphnia magna

Information on: N'-(3-(dimethylamino)propyl)-N,N-dimethylpropane-1,3-diamine
EC50 (48 h) 24 mg/l, Daphnia magna (OECD Guideline 202, part 1, Flow through.)
The statement of the toxic effect relates to the analytically determined concentration.

Aquatic plants

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)- poly(oxy(methyl-1,2-ethanediyl))

EC50 (72 h) 15 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
The details of the toxic effect relate to the nominal concentration.
EC10 (72 h) 1.4 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
The details of the toxic effect relate to the nominal concentration.
EC50 (72 h) 141.72 mg/l, Skeletonema costatum (ISO/DIS 10253, static)
The details of the toxic effect relate to the nominal concentration.
No observed effect concentration (72 h) 100 mg/l, Skeletonema costatum (ISO/DIS 10253, static)
The details of the toxic effect relate to the nominal concentration.

Information on: N'-(3-(dimethylamino)propyl)-N,N-dimethylpropane-1,3-diamine
EC50 (72 h) 7.9 mg/l (biomass), algae (OECD Guideline 201, static)
No observed effect concentration (72 h) 1.2 mg/l (biomass), algae (OECD Guideline 201, static)
Lowest observed effect concentration (72 h) 1.7 mg/l (biomass), algae (OECD Guideline 201, static)

Information on: 2-Propanol, 1-chloro-, phosphate (3:1)
EC50 (72 h) 82 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
Nominal concentration.

Chronic toxicity to aquatic invertebrates

Information on: N'-(3-(dimethylamino)propyl)-N,N-dimethylpropane-1,3-diamine
No observed effect concentration (96 h) 3.5 mg/l, Daphnia sp.

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)- poly(oxy(methyl-1,2-ethanediyl))
No data available regarding toxicity to daphnids.

Information on: 2-Propanol, 1-chloro-, phosphate (3:1)
No observed effect concentration (21 d) 32 mg/l, Daphnia magna (OECD Guideline 202, part 2, semistatic)
Nominal concentration.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

Information on: N'-(3-(dimethylamino)propyl)-N,N-dimethylpropane-1,3-diamine
activated sludge/EC20 (3 h): 170 mg/l
OECD Guideline 209 static
activated sludge/No observed effect concentration (3 h): 1,000 mg/l
OECD Guideline 209 static
activated sludge/EC50 (3 h): > 1,000 mg/l

Information on: alpha-(2-Aminomethylethyl)-omega-(2-aminomethylethoxy)- poly(oxy(methyl-1,2-ethanediyl))
OECD Guideline 209 aerobic
activated sludge of a predominantly domestic sewage/EC20 (3 h): 380 mg/l
The details of the toxic effect relate to the nominal concentration.

Information on: 2-Propanol, 1-chloro-, phosphate (3:1)

Persistence and degradability

Assessment biodegradation and elimination (H2O)
Poorly biodegradable.

Elimination information

Poorly biodegradable.

Bioaccumulative potential

Assessment bioaccumulation potential
Does not significantly accumulate in organisms.

Mobility in soil

Assessment transport between environmental compartments
Adsorption to solid soil phase is not expected.

Additional information

Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen.

Other ecotoxicological advice:
The product has not been tested. Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:
Incinerate in a licensed facility. Dispose of in a licensed facility. Do not discharge substance/product into sewer system.

Container disposal:
Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Do not attempt to refill or clean containers since residue is difficult to remove. Under no circumstances should empty drums be burned or cut open with gas or electric torch as toxic decomposition products may be liberated. Do not reuse empty containers.

14. Transport Information

Land transport
USDOT

Hazard class:	8
Packing group:	III
ID number:	UN 1760
Hazard label:	8
Proper shipping name:	CORROSIVE LIQUID, N.O.S. (contains N-[3-(DIMETHYLAMINO)PROPYL]-N,N-DIMETHYLPROPANE-1,3-DIAMINE)

Sea transport
IMDG

Hazard class:	8
Packing group:	III
ID number:	UN 1760
Hazard label:	8
Marine pollutant:	NO
Proper shipping name:	CORROSIVE LIQUID, N.O.S. (contains N-[3-

(DIMETHYLAMINO)PROPYL]-N,N-DIMETHYLPROPANE-1,3-DIAMINE)

Air transport
IATA/ICAO

Hazard class:	8
Packing group:	III
ID number:	UN 1760
Hazard label:	8
Proper shipping name:	CORROSIVE LIQUID, N.O.S. (contains N-[3-(DIMETHYLAMINO)PROPYL]-N,N-DIMETHYLPROPANE-1,3-DIAMINE)

15. Regulatory Information

Federal Regulations

Registration status:
Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

State regulations

State RTK	CAS Number	Chemical name
PA	111-46-6	diethylene glycol

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including PROPYLENE OXIDE, which is known to the State of California to cause cancer, and TOLUENE, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

[Other Prop 65 components may be present in the product.]

NFPA Hazard codes:
Health: 3 Fire: 1 Reactivity: 1 Special:

HMIS III rating
Health: 3¤ Flammability: 1 Physical hazard: 1

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2017/10/12

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in

a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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END OF DATA SHEET