

MATERIAL SAFETY

BASF Corporation Chemicals Division
100 Cherry Hill Road, Parsippany, New Jersey 07054, (201) 316-3000

DATA SHEET

BASF

PRODUCT NUMBER: 581770 241-7 Antifreeze Formulation

SECTION I

*Registered Trademark

TRADE NAME: 241-7 Antifreeze Formulation

CHEMICAL NAME: Ethylene Glycol -- Inhibited

SYNONYMS: Permanent Antifreeze

FORMULA: Mixture

CHEMICAL FAMILY: Glycols

MOL WGT.: N/A

SECTION II - INGREDIENTS

COMPONENT	CAS NO.	%	PEL/TLV - SOURCE
241-7 Antifreeze Formulation		100	Not established
Contains:			
Ethylene Glycol	107-21-1	~ 95	50 ppm Ceiling OSHA
Proprietary Additives		< 5	Not established

SARA Title III Sect. 313: Listed

SECTION III - PHYSICAL DATA

BOILING/MELTING POINT @760 mm Hg: 330°F/ N/A

PH: 10.0-11.0

VAPOR PRESSURE mm Hg @20 C: 18

SPECIFIC GRAVITY OR BULK DENSITY: 1.123

SOLUBILITY IN WATER: Complete

APPEARANCE: Clear, Dyed Liquid

ODOR: Glycol

INTENSITY: Slight

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (TEST METHOD): 262°F C.O.C.

AUTOIGNITION TEMP: 775°F

FLAMMABILITY LIMITS IN AIR (% BY VOL)

LOWER: N/A

UPPER: N/A

EXTINGUISHING MEDIUM

Use water fog, alcohol foam, CO2 or dry chemical extinguishing media. NFPA: 1/1/0

SPECIAL FIREFIGHTING PROCEDURES

Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Avoid breathing vapors of heated or burning antifreeze.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapors from heated (above flash point) product may travel to a source of ignition and flash back.

EMERGENCY TELEPHONE NUMBER

CHEMTREC 800-424-9300
201-316-3000

THIS NUMBER IS AVAILABLE DAYS, NIGHTS, WEEKENDS AND HOLIDAYS

SECTION V - HEALTH DATA

<p>TOXICOLOGICAL TEST DATA: 241-7 Antifreeze Formulation Ethylene Glycol Rat, Oral LD50 Human, Reported Lethal Dose Silicates Borates</p>	<p>RESULT: 5.8 g/kg. 100 c.c. Eye and skin irritant Moderately toxic by ingestion</p>
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EFFECTS OF OVEREXPOSURE:
 Contact with this product causes eye and skin irritation.
 Inhalation of vapors or mists may be irritating to the respiratory tract.
 Ingestion of about 100 ml. of ethylene glycol may result in acute poisoning, which is characterized by severe abdominal disturbances, central nervous system depression and possible respiratory or renal failure.
 Prolonged inhalation of the vapors may cause unconsciousness and increased lymphocyte counts.
 Chronic overexposure may lead to liver degeneration and severe renal damage.
 Animal studies indicate that ethylene glycol may be embryotoxic and teratogenic by the oral and inhalation routes.

FIRST AID PROCEDURES:
 Eyes - Immediately wash eyes with running water for 15 minutes. If irritation develops, consult a physician.

 Skin - Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, consult a physician.

 Ingestion - If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

 Inhalation - Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

SECTION VI - REACTIVITY DATA

STABILITY:	Stable.	
CONDITIONS TO AVOID:	N/A	
CHEMICAL INCOMPATIBILITY:	N/A	
HAZARDOUS DECOMPOSITION PRODUCTS:	N/A	
HAZARDOUS POLYMERIZATION:	Does not occur	
CONDITIONS TO AVOID:	N/A	
CORROSIVE TO METAL:	No	OXIDIZER: No

SECTION VII - SPECIAL PROTECTION

RESPIRATORY PROTECTION:
 If vapors or mists are generated, wear a NIOSH/MSHA approved organic vapor/mist respirator.

EYE PROTECTION: If splashing can occur, use chemical goggles or full face shield.

PROTECTIVE CLOTHING: Use rubber gloves, apron and shoes.
 Remove contaminated clothing immediately and wash before reuse.

VENTILATION: Local exhaust to control vapors or mists.

OTHER: N/A

SECTION VIII - ENVIRONMENTAL DATA

ENVIRONMENTAL TOXICITY DATA:

Aquatic toxicity rating: TLm96 1000-100 ppm.

SPILL AND LEAK PROCEDURES:

Spills should be contained, solidified, and placed in suitable containers for disposal. This material is not regulated under RCRA or CERCLA ("Superfund"). Clean up quickly as spills are a slipping hazard.

HAZARDOUS SUBSTANCE SUPERFUND: No RQ(lbs):

WASTE DISPOSAL METHOD:

Incinerate or bury in a licensed facility.
Do not discharge into waterways. Discharge to sewer systems with prior approvals is acceptable.

HAZARDOUS WASTE 40CFR261: No HAZARDOUS WASTE NUMBER:

CONTAINER DISPOSAL:

Dispose of in licensed facility.
Recommend crushing or other means to prevent unauthorized reuse.

SECTION IX - SHIPPING DATA

D.O.T. PROPER SHIPPING NAME (49CFR172.101-102)

None

HAZARDOUS SUBSTANCE (49CFR CERCLA LIST)

No

REPORTABLE QUANTITY (RQ) None

D.O.T. HAZARD CLASSIFICATION (CFR172.101-102)

PRIMARY

None

SECONDARY

N/A

D.O.T. LABELS REQUIRED (49CFR172.101-102)

None

D.O.T. PLACARDS
REQUIRED (CFR172.504)

None

POISON CONSTITUENT
(49CFR172.203(K))

N/A

BILL OF LADING DESCRIPTION

Antifreeze Preparations, Proprietary
(Ethylene Glycol Base)

CC NO.

332

UN/NA CODE

None

SECTION X - PRODUCT LABEL**WARNING:**

CONTAINS ETHYLENE GLYCOL (CAS No: 107-21-1)
CONTACT MAY CAUSE TEMPORARY EYE AND SKIN IRRITATION.
INGESTION MAY RESULT IN ACUTE POISONING, CHARACTERIZED BY SEVERE ABDOMINAL DISTURBANCES, CENTRAL NERVOUS SYSTEM DEPRESSION AND POSSIBLE RESPIRATORY OR RENAL FAILURE.
PROLONGED INHALATION OF VAPORS MAY RESULT IN IRRITATION OR UNCONSCIOUSNESS.
CHRONIC OVEREXPOSURE MAY LEAD TO LIVER AND KIDNEY DAMAGE.
ETHYLENE GLYCOL WAS TERATOGENIC IN LABORATORY ANIMAL STUDIES.

FIRST AID:

- EYES -** Immediately wash eyes with running water for 15 minutes. If irritation develops, consult a physician.
- SKIN -** Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, consult a physician.
- INGESTION -** If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.
- INHALATION -** Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

HANDLING AND STORAGE:

Keep containers closed. In case of spill, clean up quickly as product is slippery. Wash away small amounts with cool water. Absorb large amounts with absorbent material or dike and pump into drums for proper disposal. Incinerate or bury in an approved landfill under guidance of local EPA. Prevent run-off onto public land or into waterways.

IN CASE OF FIRE:

Use water fog, alcohol foam, CO₂ or dry chemical extinguishing media. Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Vapors from heated product can travel to source of ignition and flash back. Moderate explosion hazard when exposed to flame.

EMPTY CONTAINERS:

All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Do not reuse this container unless it is professionally cleaned and reconditioned.

DISPOSAL:

Spill material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations. Refer to our Material Safety Data Sheet for specific disposal instructions.

IN CASE OF CHEMICAL EMERGENCY:

Call CHEMTREC day or night for assistance and information concerning spilled material, fire, exposure and other chemical accidents: 800-424-9300.

ATTENTION: This product is sold solely for use by industrial institutions.

Refer to our Technical Bulletin and Material Safety Data Sheet regarding safety, usage, applications, hazards, procedures and disposal of this product.
Consult your supervisor for additional information.

ANTI-FREEZE ETHYLENE GLYCOL BASE/MACCGUARD

70 071005

WARNING!

HARMFUL IF SWALLOWED
MAY CAUSE EYE IRRITATION AND DERMATITIS

PRECAUTIONS FOR STORAGE & HANDLING:

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. USE NON-SPARKING TOOLS. USE WITH ADEQUATE VENTILATION. KEEP CONTAINER CLOSED WHEN NOT IN USE, USE PROPER GROUNDING DEVICE, USE SPLASH GOGGLES OR FACE SHIELD. USE REQUIRED SAFETY EQUIPMENT, WEAR AND USE PROTECTIVE CLOTHING.

FIRST AID:

EYE CONTACT: Flush eyes with water for at least 5 minutes, occasionally lifting the lower and upper lids, until irritation subsides, if irritation persists, **GET MEDICAL ATTENTION.**

SKIN CONTACT: Remove contaminated clothing and shoes. Do not reuse contaminated clothing unless laundered. Wash skin thoroughly with mild soap and water for at least 15 minutes. If irritation persists, **GET MEDICAL ATTENTION.**

INHALE: Overcome or affected, remove victim from exposure. If breathing is irregular or stopped, persons qualified to perform first aid should start artificial respiration, administer oxygen if needed. **GET MEDICAL ATTENTION.**

INGESTION: If swallowed, induce vomiting immediately by giving 2 glasses of water and placing finger down throat of victim, never give anything by mouth to an unconscious person. **GET MEDICAL ATTENTION.**

FIRE:

USE FOAM, DRY CHEMICAL, CARBON DIOXIDE OR VAPORIZING LIQUID.
USE WATERSPRAY TO KEEP ADJACENT CONTAINERS COOL.
FIRE FIGHTERS USE SELF-CONTAINED BREATHING APPARATUS.

MFG. CAS. NO: 107-21-1

HEALTH 1
FLAMMABILITY 1
REACTIVITY 0

SPILLS AND LEAKS:

ELIMINATE ALL IGNITION SOURCES. VENTILATE CONFINED SPACES. KEEP PUBLIC AWAY.
RECOVER FREE PRODUCT, ADD SAND, EARTH OR OTHER SUITABLE ABSORBENT TO SPILL AREA.
KEEP PRODUCT OUT OF SEWERS AND WATERWAYS.
ADVISE AUTHORITIES IF PRODUCT CAN NOT BE CONTAINED.

FOR COMPLETE INFORMATION CONSULT MSDS FORM	
FOR INDUSTRIAL USE ONLY	FOR EMERGENCY ASSISTANCE! CALL: CHEMTREC 1-800-424-9300
Seller makes no warranty, express or implied, concerning this material or the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this when such use and/or handling is contrary to label instructions.	
ATTENTION! This container is hazardous when emptied. Since emptied container retains product residue (Vapor or Liquid) all labeled hazard precautions must be observed.	

MacARTHUR PETROLEUM & SOLVENT CO., INC.
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NEWARK, NJ 07104
(201) 482-4400
TELEFAX: 138-386 MACCARTHUR NWK.

LOT NO.