

MATERIAL SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

Manufacturer details:

ADVANCED PACKAGING INC.

12678 BURT ROAD

Detroit, Michigan 48223

24 Hour Emergency Contact: 1-313-942-9888

Corporate Emergency Telephone: 1-313-942-9888 M-F 9:00-5:00

Spill information:

Health information:

Greenzone

Version	Revision Date:	Print Date: 09/26/2022
4.0	09/25/2022	Date of last issue: 12/21/2018

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME/NUMBER:	GREENZONE 50/50 (-34)
CHEMICAL FAMILY:	ANTIFREEZE/COOLANT
CAS NUMBER:	UNASSIGNED
HMIS: 2-2-0-F	

Section 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Acute toxicity (Oral)

: Category 4

Specific target organ toxicity

- repeated exposure

: Category 2 (Kidney)

GHS label elements

Hazard pictograms

:

Signal word

: Warning

Hazard statements

: PHYSICAL HAZARDS:

Not classified as a physical hazard under GHS criteria.

HEALTH HAZARDS:

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

ENVIRONMENTAL HAZARDS:

Not classified as an environmental hazard under GHS criteria.

SECTION 3 – COMPOSITION ON INGREDIENTS

ETHYLENE GLYCOL	CAS # 111-76-2
PERCENTAGE BY WEIGHT:	45-50%.
OSHA PEL: NON ESTABLISHED	

Inhibitors	1 – 5%
-------------------	---------------

NON-HAZARDOUS INGREDIENTS	
PERCENTAGE	40 - 60%
WATER	CAS# 7732-18-5

LISTED IN NTP, IARC or OSHA 1910(z): YES, OSHA Z-1-A, NOT CARCINOGENIC.

SECTION 4 – EMERGENCY AND FIRST AID PROCEDURES**General advice**

: DO NOT DELAY.

Keep victim calm. Obtain medical treatment immediately.

If inhaled

: Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

In case of skin contact

: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.

If persistent irritation occurs, obtain medical attention.

In case of eye contact

: Flush eye with copious quantities of water.

Remove contact lenses, if present and easy to do. Continue rinsing.

If persistent irritation occurs, obtain medical attention.

If swallowed

: DO NOT DELAY.

If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Rinse mouth.

Most important symptoms and effects, both acute and delayed

: Kidney toxicity may be recognized by blood in the urine or increased or decreased urine flow. Other signs and symptoms can include nausea, vomiting, abdominal cramps, diarrhoea, lumbar pain shortly after ingestion, and possibly narcosis and death.

High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued

inhalation may result in unconsciousness and/or death.

Protection of first-aiders

: When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

Indication of any immediate medical attention and special treatment needed

: **IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT!**

The preferred treatment is immediate transportation to a medical facility and use of appropriate treatment including possible administration of activated charcoal, gastric lavage and or gastric aspiration. If none of the above are immediately available and a delay of more than one hour is anticipated before such medical attention can be obtained, induction of vomiting may be appropriate using IPECAC syrup (Contraindicated if there are any signs of CNS depression). This should be considered on a case by case basis following specialist advice.

Specific other treatments may include ethanol therapy, fomepizole, treatment of acidosis and haemodialysis. Seek specialist advice without delay.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

: Do not use water in a jet.

Specific hazards during firefighting

: Hazardous combustion products may include:

A complex mixture of airborne solid and liquid particulates and gases (smoke).

Carbon monoxide may be evolved if incomplete combustion occurs.

Unidentified organic and inorganic compounds.

Specific extinguishing methods

: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Avoid contact with skin and eyes.

Environmental precautions

: Use appropriate containment to avoid environmental contamination.

Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for

containment and cleaning up

: For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely
For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

SECTION 7. HANDLING AND STORAGE

Technical measures : Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Advice on safe handling

: Avoid prolonged or repeated contact with skin.

Avoid inhaling vapour and/or mists.

When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Avoidance of contact

: Strong oxidising agents.

Further information on storage stability

: Keep container tightly closed and in a cool, well-ventilated place.

Use properly labeled and closable containers.

Store at ambient temperature.

Packaging material

: Suitable material: For containers or container linings, use mild steel or high density polyethylene.

Unsuitable material: Zinc., Avoid contact with galvanized materials.

Container Advice : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Components CAS-No. Value type

(Form of exposure)

Control parameters

/ Permissible

concentration

Basis

Ethenediol 107-21-1 TWA (Vapour)

25 ppm ACGIH

Ethenediol STEL (Vapour)

50 ppm ACGIH

Biological occupational exposure limits

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: GREEN LIQUID

ODOR: GLYCOL ODOR

pH: 9.0 – 11.0

BOILING POINT F (C): >212 (100)

FREEZING POINT F (C): -34 (-36.6)

VAPOR PRESSURE (mm Hg): 30

VAPOR DENSITY (AIR=1) 1.81

SOLUBILITY IN WATER: 100%

W/G: 8.8lbs/gal

% SOLIDS BY WT.: 0.07

V.O.C.(actual): N/A

AUTOIGNITION F (C): NOT DETERMINED.

FLASH POINT F (C), METHOD: 183 (84) PMCC.

LOWER EXPLOSIVE LIMIT: NOT DETERMINED.

UPPER EXPLOSIVE LIMIT: NOT DETERMINED.

EXTINGUISHING MEDIA: FOAM, DRY CHEMICAL, WATER FOG, CO2

SENSITIVE TO IMPACT: NO

SENSITIVE TO STATIC DISCHARGE: N/A

HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON

FIRE FIGHTING PROCEDURES: USE WATER SPRAY TO KEEP FIRE EXPOSED CONTAINERS COOL TO REDUCE PRESSURE BUILD UP. WEAR SELF CONTAINED BREATHING APPARATUS.

FIRE & EXPLOSION HAZARDS: NONE EXPECTED.

SECTION 10 – STABILITY AND REACTIVITY DATA

CHEMICAL STABILITY: YES.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS: OXIDES OF CARBON AND NITROGEN.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION 11 - HEALTH AND TOXICOLOGICAL DATA

**PRIMARY ROUTES OF ENTRY: EYES, SKIN (ABSORPTION/CONTACT), AND INHALATION.
EFFECTS OF OVEREXPOSURE (ACUTE & CHRONIC): VAPORS AND LIQUID MAY DAMAGE
EYES. VAPORS AND MISTS IRRITATE THE NOSE
AND THROAT, HEADACHES AND NAUSEA.**

EXPOSURE LIMITS: ETHYLENE GLYCOL , OSHA PEL NOT ESTABLISHED.

ACUTE DERMAL LD50: RABBIT/20 ml/kg.

SENSITIZATION TO PRODUCT: N/A

CARCINOGEN: N/A

TERATOGEN: NO

MUTAGEN: NO

SYNERGISTIC PRODUCTS: N/A

**ETHYLENE GLYCOL: LD50, ORAL-RAT, 4700 MG/KG.
LD50, SKIN-RABBIT, 9530 MG/KG.**

SECTION 12. ECOLOGICAL INFORMATION

Basis for assessment : Ecotoxicological data have not been determined specifically for this product.

Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

Ecotoxicity

Product:

Toxicity (ty)

Remarks: LC/EC/IC50 > 100 mg/l

Practically non toxic:

Based on available data, the classification criteria are not met.

Toxicity to daphnia and other aquatic invertebrates (Acute toxicity)

:

Remarks: LC/EC/IC50 > 100 mg/l

Practically non toxic:

Based on available data, the classification criteria are not met.

Toxicity to algae (Acute toxicity)

:

Remarks: LC/EC/IC50 > 100 mg/l

Practically non toxic:

Based on available data, the classification criteria are not met.

Toxicity to fish (Chronic toxicity)

: Remarks: Data not available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

: Remarks: Data not available

Toxicity to microorganisms

(Acute toxicity)

: Remarks: Data not availableo fish (Acute toxici- :

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

Do not dispose into the environment, in drains or in water courses

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.

Waste, spills or used product is dangerous waste.

Contaminated packaging : Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Local legislation

Remarks : Disposal should be in accordance with applicable regional, national, and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

National Regulations

US Department of Transportation Classification (49 CFR Parts 171-180)

UN/ID/NA number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Ethylene glycol)

Class : 9

Packing group : III

Labels : 9

Reportable quantity Ethylene glycol
(5,000 lb)

Marine pollutant : no

Remarks : This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

product RQ

(lbs) Components CAS-No. Component RQ

(lbs)

Calculated

Ethenediol 107-21-1 5000 5000

SECTION 16 - OTHER INFORMATION

TSCA: ALL COMPONENTS ARE ON THE TSCA INVENTORY.

**SARA TITLE III, SECTION 313. THIS PRODUCT CONTAINS (OR IS) A TOXIC
CHEMICAL FOR ROUTINE ANNUAL TOXIC CHEMICAL RELEASE REPORTING UNDER
SECTION 313: ETHYLENE GLYCOL 107-21-1 25 - 30%**

**SARA TITLE III, SECTIONS 311 AND 312. THIS PRODUCT CONTAINS A CHEMICAL
SUBSTANCE(S) THAT IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET
THE FOLLOWING CATEGORIES:**

**AN ACUTE HEALTH HAZARD.
A CHRONIC HEALTH HAZARD.**

**PREPARED BY: ENVIRONMENTAL DEPT.
CREATION DATE: 9/25/22**

******* ADDITIONAL INFORMATION *******

**THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON
DATA BELIEVED TO BE CORRECT. HOWEVER, NO GUARANTEE OR WARRANTY OF ANY
KIND EXPRESSED OR IMPLIED IS MADE WITH RESPECT TO THE INFORMATION
CONTAINED
HEREIN. □**