



# John Deere Cool-Gard™ II PG PREMIX

## Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)  
Date of issue: 09/26/2016 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Trade name : John Deere Cool-Gard™ II PG PREMIX  
Product code : TY26968, TY26969, TY26970, TY26971

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

Use of the substance/mixture : Propylene Glycol Engine Coolant

#### 1.3. Details of the supplier of the safety data sheet

##### MANUFACTURER:

Northland Products  
1000 Rainbow Drive  
Waterloo, IA 50704

Tel: +1-319-234-5585  
+1-800-772-1724

##### SUPPLIER:

Deere & Company  
One John Deere Place  
Moline, IL 61265

E-mail: [ESOC@JohnDeere.com](mailto:ESOC@JohnDeere.com)

#### 1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300  
Chemtrec (Outside USA) +1 703-527-3887 (24 hours)  
Supplier: +1-309-748-5636 or 1-800-822-8262 (24 hours)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Rep. Tox. 2 H361

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Warning  
Hazard statements (GHS-US) : H361 - Suspected of damaging fertility or the unborn child  
Precautionary statements (GHS-US) : P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P280 - Wear eye protection, protective clothing, protective gloves  
P308+P313 - If exposed or concerned: get medical advice/attention  
P405 - Store locked up  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

#### 2.3. Other hazards

other hazards which do not result in classification : Spills of this product present a serious slipping hazard.

#### 2.4. Unknown acute toxicity (GHS-US)

0-0.5% of the mixture consists of ingredient(s) of unknown acute toxicity.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

Full text of H-phrases: see section 16

# John Deere Cool-Gard™ II PG PREMIX

## Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
1,2-Propylene glycol	(CAS No) 57-55-6	52 - 62	Not Classified
disodium tetraborate pentahydrate, borax pentahydrate	(CAS No) 12179-04-3	0 - 1	Repr. Tox. 2, H361

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Allow victim to breathe fresh air. If breathing is difficult, give oxygen. In all cases of doubt, or when symptoms persist, seek medical advice.
- First-aid measures after skin contact : Rinse and then wash skin thoroughly with water and soap. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. If redness, burning, blurred vision or swelling occur, transport to nearest medical facility for additional treatment. Get medical advice/attention.
- First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : Inhalation of mist or aerosol may cause irritation to nose and throat.
- Symptoms/injuries after skin contact : Causes skin irritation. Repeated or prolonged skin contact may cause dermatitis and defatting.
- Symptoms/injuries after eye contact : Causes serious eye irritation. Effects may include discomfort or pain and redness.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Symptoms may be delayed.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water fog. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Special hazards arising from the substance or mixture

- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

### 5.3. Advice for firefighters

- Precautionary measures fire : Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control. Gases/vapours, toxic.
- Firefighting instructions : Exercise caution when fighting any chemical fire. Do not use direct water stream; may spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Cool closed containers exposed to fire with water spray. Prevent fire-fighting water from entering environment.
- Protective equipment for firefighters : Wear approved self-contained breathing apparatus (set on positive pressure mode). Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Spilled material may present a slipping hazard. Stop leak if safe to do so. Eliminate all ignition sources if safe to do so. Avoid inhalation of vapour and spray mist. Avoid contact with skin, eyes and clothing.

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ensure adequate ventilation, especially in confined areas.

### 6.2. Environmental precautions

Prevent contamination of soil, drains and surface waters. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

# John Deere Cool-Gard™ II PG PREMIX

## Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Gather the product and place it in a spare container that has been suitably labelled. Ensure all national/local regulations are observed. Large spills: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Collect spillage. Minimize generation of dust. Take precautionary measures against static discharge. Store away from other materials. Consult the appropriate authorities about waste disposal.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Special danger of slipping by leaking/spilling product.

Precautions for safe handling : Obtain special instructions before use. Avoid contact with skin, eyes and clothes. Avoid breathing dust/fume/gas/mist/vapours/spray. Provide good ventilation in process area to prevent formation of vapour. Personal protective equipment should be selected based upon the conditions under which this product is handled or used. Empty container retains product residue.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Discard contaminated leather articles. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

Storage conditions : Keep out of reach of children. Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place away from highly flammable substances. Keep away from open flames, hot surfaces and sources of ignition. Keep out of direct sunlight. Protect from moisture. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Incompatible materials : Refer to Section 10 on Incompatible Materials.

Heat and ignition sources : Remove all sources of ignition.

Storage area : Store in dry, cool, well-ventilated area. Keep away from heat and direct sunlight.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

Appropriate engineering controls : A washing facility/water for eye and skin cleaning purposes should be present. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits. Ensure adequate ventilation.

Personal protective equipment : Avoid all unnecessary exposure. Personal protective equipment should be selected based upon the conditions under which this product is handled or used. For certain operations, additional Personal Protection Equipment (PPE) may be required. Gloves. Protective clothing. Protective goggles.



Hand protection : Wear protective gloves. Nitrile-rubber protective gloves. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection : Chemical goggles or safety glasses. with side-shields. Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection : Chemical resistant suit. Wear rubber boots. Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Use a properly fitted, air-purifying or air-fed respirator if necessary.

Other information : Do not eat, drink or smoke during use.

# John Deere Cool-Gard™ II PG PREMIX

## Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Transparent.
Colour	: Blue.
Odour	: Odourless.
Odour threshold	: No data available
pH	: 8 - 9
Relative evaporation rate (butyl acetate=1)	: 0.01
Melting point	: No data available
Freezing point	: -47 °C (-52 °F)
Boiling point	: 129 °C (264 °F)
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.05 - 1.08 (15.6°C) Specific Gravity
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: Not oxidizing.
Explosive limits	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable at normal conditions.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

No additional information available

#### 10.5. Incompatible materials

Oxidizing agents. Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

Very toxic carbon monoxide, carbon dioxide; irritating chemicals.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

John Deere Cool-Gard™ II PG PREMIX	
ATE CLP (oral)	500.000 mg/kg bodyweight

1,2-Propylene glycol (57-55-6)	
LD50 dermal rabbit	20800 mg/kg
LD50 oral rabbit	14800 mg/kg

disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)	
LC50 inhalation rat	2 mg/L

# John Deere Cool-Gard™ II PG PREMIX

## Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)	
LD50 dermal rabbit	2000 mg/kg
LD50 oral rat	3305 mg/kg

Skin corrosion/irritation	: Causes skin irritation. pH: 8 - 9
Serious eye damage/irritation	: Causes serious eye irritation. pH: 8 - 9
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Suspected of damaging fertility or the unborn child
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: Inhalation of mist or aerosol may cause irritation to nose and throat.
Symptoms/injuries after skin contact	: Causes skin irritation. Repeated or prolonged skin contact may cause dermatitis and defatting.
Symptoms/injuries after eye contact	: May Cause eye irritation. Effects may include discomfort or pain and redness.

## SECTION 12: Ecological information

### 12.1. Toxicity

1,2-Propylene glycol (57-55-6)	
EC50 Daphnia 1	10000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish	51400 mg/l (Exposure time: 96 h - Species: Pimephales promelas[static])

### 12.2. Persistence and degradability

John Deere Cool-Gard™ II PG PREMIX	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

John Deere Cool-Gard™ II PG PREMIX	
Bioaccumulative potential	Not established.

1,2-Propylene glycol (57-55-6)	
Log Pow	-0.9

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose of contents/container to comply with applicable local, national and international regulations. Liquid product may not be disposed of with household waste or landfilled. Do not allow to enter into drains/waters or in the soil. Do not re-use empty containers. Since emptied containers retain product residue, follow label warnings even after container is emptied. Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources. Empty container retains product residue.
Ecology - waste materials	: Prevent contamination of soil, drains and surface waters. Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

Not applicable

### 14.2. UN proper shipping name

Not applicable

# John Deere Cool-Gard™ II PG PREMIX

## Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

### 14.3. Additional information

Other information : No supplementary information available.

#### Overland transport

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### 1,2-Propylene glycol (57-55-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

#### 1,2-Propylene glycol (57-55-6)

Listed on the Canadian DSL (Domestic Substances List)

#### disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

#### 1,2-Propylene glycol (57-55-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

No additional information available

### 15.2.2. National regulations

#### 1,2-Propylene glycol (57-55-6)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Korean ECL (Existing Chemicals List)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

#### disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Korean ECL (Existing Chemicals List)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Japanese Pollutant Release and Transfer Register Law (PRTR Law)  
Listed on the Canadian IDL (Ingredient Disclosure List)

### 15.3. US State regulations

#### disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)  
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)

# John Deere Cool-Gard™ II PG PREMIX

## Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

### disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)  
U.S. - Illinois - Toxic Air Contaminants  
U.S. - Massachusetts - Right To Know List  
U.S. - Michigan - Occupational Exposure Limits - TWAs  
U.S. - Minnesota - Hazardous Substance List  
U.S. - Minnesota - Permissible Exposure Limits - TWAs  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Tennessee - Occupational Exposure Limits - TWAs  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Vermont - Permissible Exposure Limits - TWAs  
U.S. - Washington - Permissible Exposure Limits - STELs  
U.S. - Washington - Permissible Exposure Limits - TWAs  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet

### SECTION 16: Other information

Other information : 8/03/16 Updated cas numbers and H and P codes  
9/26/16 Removed Eye irritation from PG component, changed to Not Classified.

Full text of H-phrases: see section 16:

Rep. Tox. 2	Reproductive toxicity, Category 2
H361	Suspected of damaging fertility or the unborn child

SDS US (GHS HazCom 2012)

*The information presented herein has been compiled from sources considered to be dependable and is accurate to the best of Northland Products Company's knowledge; however, Northland Products Company makes no warranty whatsoever, expressed or implied, of merchantability or fitness for the particular purpose, regarding the accuracy of such data or the results to be obtained from the use thereof. Northland Products Company assumes no responsibility for the injury to the recipient or to third party persons or for any damage to any property and recipient assumes all such risks*