John Deere Plus 50 II™ 10W30

Safety Data Sheet

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

Date of issue: 12/04/2013 Revision date: 01/29/2015 Version: 2.0

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

1.1. Product identifier

Product form : Mixture

Trade name : John Deere Plus 50 II™ 10W30

Product code : TY26668, TY26669, TY26670, TY26671, TY26863, TY27008

Other means of identification : API CK4/SN Engine Oil

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

Use of the substance/mixture : API CK4/SN Engine Oil

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

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

Not classified

2.2. Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

other hazards which do not result in classification : This product contains a petroleum-based mineral oil. Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, (dermatitis) or oil acne. Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or other pulmonary effects. Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or other pulmonary effects. Spills of this product present a serious slipping hazard. Used oil, may contain harmful impurities. Used motor oil was associated with cancer in lifetime skin painting studies with laboratory animals. When using high-pressure equipment, injection of product can occur . Injection under the skin of pressurized hydrocarbons can cause severe, permanent tissue damage.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Distillates, petroleum, solvent-dewaxed heavy paraffinic	(CAS No) 64742-65-0	0.1 - 5	Asp. Tox. 1, H304
Distillates, petroleum, solvent-refined heavy paraffinic	(CAS No) 64741-88-4	0.1 - 5	Acute Tox. 4 (Inhalation:dust,mist), H332 Asp. Tox. 1, H304

Name	Product identifier	%	GHS-US classification
Distillates, petroleum, solvent-refined light paraffinic	(CAS No) 64741-89-5	0.1 - 5	Acute Tox. 4 (Inhalation:dust,mist), H332 Asp. Tox. 1, H304

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 : Allow victim to breathe fresh air. Allow the victim to rest. In case of breathing difficulties administer oxygen.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

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. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries : This product contains a petroleum-based mineral oil. Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, (dermatitis) or oil acne. Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or other pulmonary effects.

Symptoms/injuries after inhalation : In the event of insufficient ventilation: Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or other pulmonary effects. Typical symptoms are respiratory irritation, breathlessness, coughing, chest tightness and difficulty breathing.

Symptoms/injuries after skin contact : Frequent or prolonged contact with skin may cause dermal irritation. Injection under the skin of pressurized hydrocarbons can cause severe, permanent tissue damage.

Symptoms/injuries after eye contact : If user operations generate dust or fumes, . May cause eye irritation. Exposure to vapor may cause intense watering and irritation to eyes.

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

Injection under the skin of pressurized hydrocarbons can cause severe, permanent tissue damage. Immediate treatment at a surgical emergency center is recommended.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : When heated above the flash point, releases flammable vapours. Leaks/ruptures in high pressure system can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs).

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 : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection. Wear self-contained respiratory apparatus during longer or intensive exposition or spraying processing.

Other information : Special danger of slipping by leaking/spilling product.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protective equipment as required. Special danger of slipping by leaking/spilling product. Stop leak if safe to do so. Relevant water authorities should be notified of any large spillage to water course or drain. This material can burn but will not readily ignite. Under fire conditions closed containers may rupture or explode.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel. Avoid breathing mist or vapor . Avoid direct eye contact with product, also via contamination on hands. Avoid contact with skin, eyes and clothes.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : The low volatility of this product does not require ventilation. However depending on the condition an adequate ventilation might be required.

6.2. Environmental precautions

Prevent entry to sewers and public waters. An environmental fate analysis is not available for this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as fabric absorbents, clay or diatomaceous earth as soon as possible. Recover large spills by pumping (use an explosion proof or hand pump). Collect spillage. Store away from other materials. Consult the appropriate authorities about waste disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

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. Never use pressure to empty containers . Over pressure may rupture containers, cause serious injury, cause or accelerate fire.

Precautions for safe handling : Keep out of reach of children. Avoid contact with skin, eyes and clothes. Personal protective equipment should be selected based upon the conditions under which this product is handled or used. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing dust/fume/gas/mist/vapours/spray. Empty container retains product residue. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Ground/bond container and receiving equipment. Do not use in high pressure systems in the vicinity of flames, sparks and hot surfaces.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Keep only in the original container in a cool, well-ventilated place away from highly flammable substances.

Incompatible materials : Strong acid. Base. Oxidizing agents.

Storage temperature : Store at ambient temperature

Heat and ignition sources : Remove all sources of ignition.

Storage area : Well-ventilated area.

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 : Use ventilation to keep exposure to airborne contaminants below the exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Personal protective equipment should be selected based upon the conditions under which this product is handled or used. Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles.

Hand protection : Wear protective gloves, rubber gloves.

Eye protection : Chemical goggles or safety glasses. with side-shields.

Skin and body protection : Long sleeved protective clothing. Wear rubber boots.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Protection factors vary depending upon the type of respirator used. Wear a self-contained breathing apparatus and appropriate personal protective equipment (PPE).

Environmental exposure controls : Do not allow run-off from fire-fighting to enter drains or water courses. Ensure waste is collected and contained. Notify authorities if product enters sewers or public waters.

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Clear to light amber.
Odour	:	Petroleum characteristic.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	> 320 °C (608 ºF)
Flash point	:	223 °C (434 ºF) Test method: COC
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Lower Flammability Limit (LFL) 0.9 Upper Flammability Limit (UFL) 7.0
Vapour pressure	:	< 0.01 mm Hg Maximum @ 37.8 °C (100 °F)
Relative vapour density at 20 °C	:	> 1
Relative density	:	0.871 g/cm³ at 15.6 °C / 60 °F
Solubility	:	Water: insoluble Organic solvent:completely soluble
Log Pow	:	No data available
Log Kow	:	Base oil hydrocarbons: log Kow > 4 (estimate)
Viscosity, kinematic	:	85 cSt (40 °C/104 °F)
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
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 temperatures and pressures.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources.

10.5. Incompatible materials

Strong acid. Strong bases. Oxidizing agents.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. unburned hydrocarbons.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Distillates, petroleum, solvent-refined heavy paraffinic (64741-88-4)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	2.18 mg/l/4h
ATE CLP (dust,mist)	2.180 mg/l/4h

Distillates, petroleum, solvent-refined light paraffinic (64741-89-5)	
LD50 oral rat	> 5000 mg/kg

Distillates, petroleum, solvent-refined light paraffinic (64741-89-5)	
LD50 dermal rabbit	> 5 g/kg
LC50 inhalation rat (mg/l)	2.18 mg/l/4h
ATE CLP (dust,mist)	2.180 mg/l/4h

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met

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 : Not classified
Based on available data, the classification criteria are not met

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

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : In the event of insufficient ventilation: Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or other pulmonary effects. Typical symptoms are respiratory irritation, breathlessness, coughing, chest tightness and difficulty breathing.

Symptoms/injuries after skin contact : Frequent or prolonged contact with skin may cause dermal irritation. Injection under the skin of pressurized hydrocarbons can cause severe, permanent tissue damage.

Symptoms/injuries after eye contact : If user operations generate dust or fumes, . May cause eye irritation. Exposure to vapor may cause intense watering and irritation to eyes.

SECTION 12: Ecological information

12.1. Toxicity

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)	
LC50 fishes 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Distillates, petroleum, solvent-refined heavy paraffinic (64741-88-4)	
LC50 fishes 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Distillates, petroleum, solvent-refined light paraffinic (64741-89-5)	
LC50 fishes 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and degradability

John Deere Plus 50 IITM 10W30	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

John Deere Plus 50 II™ 10W30	
Log Kow	Base oil hydrocarbons: log Kow > 4 (estimate)
Bioaccumulative potential	Not established.

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

Sewage disposal recommendations : Prevent entry to sewers and public waters. An environmental fate analysis is not available for this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national 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. It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations.

Additional information : Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources. Used oil, may contain harmful impurities. Used motor oil was associated with cancer in lifetime skin painting studies with laboratory animals.

Ecology - waste materials : 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

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

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)

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

Distillates, petroleum, solvent-refined heavy paraffinic (64741-88-4)

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

Distillates, petroleum, solvent-refined light paraffinic (64741-89-5)

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

15.2. International regulations

CANADA

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)

Listed on the Canadian DSL (Domestic Sustances List)

Distillates, petroleum, solvent-refined heavy paraffinic (IP 346<3%) (64741-88-4)

Listed on the Canadian DSL (Domestic Sustances List)

Distillates, petroleum, solvent-refined light paraffinic (64741-89-5)

Listed on the Canadian DSL (Domestic Sustances List)

EU-Regulations

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)

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

Distillates, petroleum, solvent-refined heavy paraffinic (64741-88-4)

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

Distillates, petroleum, solvent-refined light paraffinic (64741-89-5)
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

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)
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)

Distillates, petroleum, solvent-refined heavy paraffinic (64741-88-4)
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)

Distillates, petroleum, solvent-refined light paraffinic (64741-89-5)
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)

15.3. US State regulations

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)
U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term

Distillates, petroleum, solvent-refined heavy paraffinic (64741-88-4)
U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term

Distillates, petroleum, solvent-refined light paraffinic (64741-89-5)
U.S. - Massachusetts - Right To Know List U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term

SECTION 16: Other information

Indication of changes : 3. Composition/information on ingredients. 2.1. Classification of the substance or mixture.

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
H304	May be fatal if swallowed and enters airways
H332	Harmful if inhaled

SDS US (GHS HazCom 2012)

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