

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number TY25076
Product name JOHN DEERE BRAKE AND PARTS CLEANER
Effective date 17-Sep-2007
Manufacturer information DEERE & COMPANY
MOLINE, IL 61265 United States
Manufacturer phone General Assistance 1-800-332-9000
Emergency telephone US 800-424-9300
Emergency telephone outside US 703-527-3887
Supersedes date 02-May-2007

2. Hazards Identification

Emergency overview VAPOR HARMFUL.
EXTREMELY FLAMMABLE
CONTENTS UNDER PRESSURE.
Aerosol. Pressurized container may explode when exposed to heat or flame.

Harmful in contact with eyes. Cancer hazard. Irritating to skin. Irritating to respiratory system. Prolonged exposure may cause chronic effects.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure Inhalation. Skin contact.

Eyes Contact may irritate or burn eyes. Eye contact may result in corneal injury.

Skin Irritating to skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Irritating to respiratory system. Prolonged inhalation may be harmful.

Ingestion Exposure by ingestion of an aerosol is unlikely. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause delayed lung damage.

Target organs Kidney. Central nervous system. Gastrointestinal tract. Respiratory system.

Chronic effects Conjunctiva. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause delayed lung damage.

Signs and symptoms Discomfort in the chest. Corneal damage. Narcosis. Conjunctivitis. Defatting of the skin. Irritation.

Potential environmental effects Components of this product are hazardous to aquatic life.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Xylene	1330-20-7	40 - 50
Mineral Spirits	64742-48-9	15 - 20
Propane	74-98-6	10 - 15
n-Butane	106-97-8	10 - 15
Ethyl Benzene	100-41-4	8 - 10
Methanol	67-56-1	3 - 5
Non-hazardous and other components below reportable levels		0.1 - 1

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention immediately.
Skin contact	Remove and isolate contaminated clothing and shoes. Wash off with warm water and soap. Get medical attention if irritation develops or persists. For minor skin contact, avoid spreading material on unaffected skin.
Inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.
Ingestion	Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to physician

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General advice

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Call a physician if symptoms develop or persist.

5. Fire Fighting Measures

Flammable properties	Containers may explode when heated. Vapor or gas may spread to distant ignition sources and flash back.
Extinguishing media	
Suitable extinguishing media	Water fog. Foam. Alcohol foam. Dry chemical. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Protection of firefighters	
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Protective equipment and precautions for firefighters	In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
Specific hazards	Fire may produce irritating, corrosive and/or toxic gases.

6. Accidental Release Measures

Personal precautions	Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable.
Methods for cleaning up	Should not be released into the environment. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling	Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Do not use if spray button is missing or defective. Use only with adequate ventilation. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not breathe gas/fumes/vapor/spray. Wear personal protective equipment. Avoid prolonged exposure.
Storage	Level 3 Aerosol. Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Avoid exposure to long periods of sunlight. Keep in an area equipped with sprinklers. Keep out of the reach of children. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Xylene	1330-20-7	100 ppm	150 ppm	Not established
Mineral Spirits	64742-48-9	100 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established
Ethyl Benzene	100-41-4	100 ppm	125 ppm	Not established
Methanol	67-56-1	200 ppm	250 ppm	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Xylene	1330-20-7	100 ppm	Not established	Not established
Mineral Spirits	64742-48-9	500 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
Ethyl Benzene	100-41-4	100 ppm	Not established	Not established
Methanol	67-56-1	200 ppm	Not established	Not established

Engineering controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye / face protection

Wear chemical goggles.

Skin protection

Wear appropriate chemical resistant clothing. Protective gloves.

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA).

General hygiene considerations

When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Color	clear colorless
Odor	Solvent.
Physical state	Liquid.
Form	Aerosol.
Flammability (HOC)	34.44 kJ/g estimated
Flash back	Yes
Pressure	37 - 47 psig @70F
Solubility	Negligible
Flash point	-156 °F (-104.4 °C) estimated
Boiling point	129.2 °F (53.9 °C) estimated
Specific gravity	0.7336 estimated
pH	Not applicable

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition. Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Hazardous decomposition products	Irritants. Toxic gas. May include oxides of nitrogen.

11. Toxicological Information

Acute effects	Acute LD50: 7562 mg/kg estimated, Rat, Oral Acute LD50: 3874 mg/kg estimated, Rat, Dermal Acute LC50: 166 mg/l/4h estimated, Rat, Inhalation
Sensitization	Not expected to be hazardous by OSHA criteria.
Local effects	Contact may irritate or burn eyes. Irritating to skin. Irritating to respiratory system. Components of the product may be absorbed into the body through the skin.

Chronic effects	Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects.
Subchronic effects	Kidney injury may occur.
Carcinogenicity	Hazardous by OSHA criteria.
Neurological effects	Hazardous by OSHA criteria.
Mutagenicity	Not expected to be hazardous by OSHA criteria.
Reproductive effects	Not expected to be hazardous by OSHA criteria.
Teratogenicity	Not expected to be hazardous by OSHA criteria.
Epidemiology	Hazardous by OSHA criteria.
Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicity	LC50 25.45 mg/L estimated, Fish, 96.00 Hours, EC50 21.47 mg/L estimated, Daphnia, 48.00 Hours, IC50 53.68 mg/L estimated, Algae, 72.00 Hours,
Environmental effects	Harmful to aquatic life.

13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 F
Disposal instructions	Contents under pressure. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG

Not regulated as hazardous goods.

IATA

Not regulated as hazardous goods.

15. Regulatory Information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
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Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical	Yes
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CERCLA (Superfund) reportable quantity

Xylene: 100.0000
Ethyl Benzene: 1000.0000
Methanol: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No
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Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

U.S. - Pennsylvania - RTK (Right to Know) List

Chemical Name	Inventory Number	Hazard
Ethyl Benzene	100-41-4	Environmental hazard
Methanol	67-56-1	Environmental hazard
n-Butane	106-97-8	Present
Propane	74-98-6	Present
Xylene	1330-20-7	Environmental hazard

16. Other Information

HMIS® ratings

Health: 2*
Flammability: 4
Physical hazard: 0

Prepared by

Regulatory Compliance

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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