

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>John Deere Battery Terminal Protectant</b>	
<b>Other means of identification</b>		
<b>Product Code</b>	TY25766	
<b>Recommended use</b>	Battery terminal protector	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Company name</b>	East Penn Manufacturing Co.	
<b>Address</b>	102 Deka Road Lyon Station, PA 19536 United States	
<b>Telephone</b>	General Information	610-682-6361
	Customer Service	610-682-4231
<b>Website</b>	www.dekabatteries.com	
<b>E-mail</b>	Not available.	
<b>Emergency phone number</b>	24-Hour Emergency	800-424-9300 (US)
	(CHEMTREC)	703-527-3887 (International)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable aerosols	Category 1
	Gases under pressure	Liquefied gas
	Physical hazards not otherwise classified	Category 1
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 2
	Reproductive toxicity (fertility)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure (oral)	Category 2 (central nervous system, kidney, liver)
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

### Label elements



**Signal word**

Danger

**Hazard statement**

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging fertility. May cause damage to organs (central nervous system, kidney, liver) through prolonged or repeated exposure by ingestion. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

## Precautionary statement

### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe mist or vapor. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

### Response

IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. In case of fire: Do not use water jet as an extinguisher, as this will spread the fire. Collect spillage.

### Storage

Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50°C/122°F.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Other hazards

None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
liquefied petroleum gas		68476-86-8	15 - 40
n-heptane		142-82-5	10 - 30
petrolatum		8009-03-8	7 - 13
2-methylpentane		107-83-5	5 - 10
3-methylhexane		589-34-4	5 - 10
naphtha (petroleum), hydrotreated light		64742-49-0	5 - 10
methylcyclohexane		108-87-2	3 - 7
2-methylhexane		591-76-4	1 - 5
heptane, branched, cyclic and linear		426260-76-6	1 - 5
paraffin oils (petroleum), catalytic dewaxed heavy		64742-70-7	1 - 5
solvent naphtha (petroleum), light aliph.		64742-89-8	1 - 5
xylene		1330-20-7	1 - 5
3-ethylpentane		617-78-7	0.5 - 1.5
ethylbenzene		100-41-4	0.5 - 1.5
n-hexane		110-54-3	0.5 - 1.5
2,2-dimethylbutane		75-83-2	0.1 - 1
2,3-dimethylbutane		79-29-8	0.1 - 1
3,3-dimethylpentane		562-49-2	0.1 - 1
3-methylpentane		96-14-0	0.1 - 1
paraffin oils (petroleum), catalytic dewaxed light		64742-71-8	0.1 - 1
toluene		108-88-3	0.1 - 1

The exact percentage (concentration) of composition has been withheld as a trade secret.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

### Skin contact

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Most important symptoms/effects, acute and delayed</b>	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Edema. Jaundice. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may rupture when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire fighting equipment/instructions</b>	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Extremely flammable aerosol. Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Stop leak if you can do so without risk. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values Components

Components	Type	Value	Form
2,2-dimethylbutane (CAS 75-83-2)	STEL	1000 ppm	
	TWA	500 ppm	
2,3-dimethylbutane (CAS 79-29-8)	STEL	1000 ppm	
	TWA	500 ppm	
2-methylhexane (CAS 591-76-4)	STEL	500 ppm	
	TWA	400 ppm	
2-methylpentane (CAS 107-83-5)	STEL	1000 ppm	
	TWA	500 ppm	
3,3-dimethylpentane (CAS 562-49-2)	STEL	500 ppm	
	TWA	400 ppm	
3-ethylpentane (CAS 617-78-7)	STEL	500 ppm	
	TWA	400 ppm	
3-methylhexane (CAS 589-34-4)	STEL	500 ppm	
	TWA	400 ppm	
3-methylpentane (CAS 96-14-0)	STEL	1000 ppm	
	TWA	500 ppm	
ethylbenzene (CAS 100-41-4)	TWA	20 ppm	
methylcyclohexane (CAS 108-87-2)	STEL	500 ppm	
	TWA	400 ppm	
n-heptane (CAS 142-82-5)	STEL	500 ppm	
	TWA	400 ppm	
n-hexane (CAS 110-54-3)	TWA	50 ppm	
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	TWA	5 mg/m3	Inhalable fraction.
petrolatum (CAS 8009-03-8)	TWA	5 mg/m3	Inhalable fraction.
toluene (CAS 108-88-3)	TWA	20 ppm	
xylylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

Components	Type	Value	Form
2,2-dimethylbutane (CAS 75-83-2)	STEL	3500 mg/m3	
		1000 ppm	
	TWA	1760 mg/m3 500 ppm	
2,3-dimethylbutane (CAS 79-29-8)	STEL	3500 mg/m3	
		1000 ppm	
	TWA	1760 mg/m3 500 ppm	
2-methylhexane (CAS 591-76-4)	STEL	2050 mg/m3	
		500 ppm	
	TWA	1640 mg/m3 400 ppm	
2-methylpentane (CAS 107-83-5)	STEL	3500 mg/m3	
		1000 ppm	
	TWA	1760 mg/m3 500 ppm	
3,3-dimethylpentane (CAS 562-49-2)	STEL	2050 mg/m3	
		500 ppm	
	TWA	1640 mg/m3 400 ppm	
3-ethylpentane (CAS 617-78-7)	STEL	2050 mg/m3	
		500 ppm	
	TWA	1640 mg/m3 400 ppm	
3-methylhexane (CAS 589-34-4)	STEL	2050 mg/m3	
		500 ppm	
	TWA	1640 mg/m3 400 ppm	
3-methylpentane (CAS 96-14-0)	STEL	3500 mg/m3	
		1000 ppm	
	TWA	1760 mg/m3 500 ppm	
ethylbenzene (CAS 100-41-4)	STEL	543 mg/m3	
		125 ppm	
	TWA	434 mg/m3 100 ppm	
methylcyclohexane (CAS 108-87-2)	STEL	2050 mg/m3	

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

Components	Type	Value	Form
		500 ppm	
	TWA	1610 mg/m3	
		400 ppm	
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)	TWA	1590 mg/m3	
		400 ppm	
n-heptane (CAS 142-82-5)	STEL	2050 mg/m3	
		500 ppm	
	TWA	1640 mg/m3	
		400 ppm	
n-hexane (CAS 110-54-3)	TWA	176 mg/m3	
		50 ppm	
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
petrolatum (CAS 8009-03-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)	TWA	1590 mg/m3	
		400 ppm	
toluene (CAS 108-88-3)	TWA	188 mg/m3	
		50 ppm	
		651 mg/m3	
xylene (CAS 1330-20-7)	STEL	150 ppm	
		434 mg/m3	
	TWA	100 ppm	

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value	Form
2,2-dimethylbutane (CAS 75-83-2)	TWA	200 ppm	
2,3-dimethylbutane (CAS 79-29-8)	TWA	200 ppm	
2-methylhexane (CAS 591-76-4)	STEL	500 ppm	
	TWA	400 ppm	
2-methylpentane (CAS 107-83-5)	TWA	200 ppm	
3,3-dimethylpentane (CAS 562-49-2)	STEL	500 ppm	
	TWA	400 ppm	
3-ethylpentane (CAS 617-78-7)	STEL	500 ppm	
	TWA	400 ppm	
3-methylhexane (CAS 589-34-4)	STEL	500 ppm	
	TWA	400 ppm	
3-methylpentane (CAS 96-14-0)	TWA	200 ppm	
ethylbenzene (CAS 100-41-4)	TWA	20 ppm	
methylcyclohexane (CAS 108-87-2)	STEL	500 ppm	

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value	Form
n-heptane (CAS 142-82-5)	TWA	400 ppm	
	STEL	500 ppm	
n-hexane (CAS 110-54-3)	TWA	400 ppm	
	TWA	20 ppm	
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	TWA	1 mg/m3	Mist.
toluene (CAS 108-88-3)	TWA	20 ppm	
xylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

Components	Type	Value	Form
2,2-dimethylbutane (CAS 75-83-2)	STEL	1000 ppm	
2,3-dimethylbutane (CAS 79-29-8)	TWA	500 ppm	
	STEL	1000 ppm	
2-methylhexane (CAS 591-76-4)	TWA	500 ppm	
	STEL	500 ppm	
2-methylpentane (CAS 107-83-5)	TWA	400 ppm	
	STEL	1000 ppm	
3,3-dimethylpentane (CAS 562-49-2)	TWA	500 ppm	
	STEL	500 ppm	
3-ethylpentane (CAS 617-78-7)	TWA	400 ppm	
	STEL	500 ppm	
3-methylhexane (CAS 589-34-4)	TWA	400 ppm	
	STEL	500 ppm	
3-methylpentane (CAS 96-14-0)	TWA	400 ppm	
	STEL	1000 ppm	
ethylbenzene (CAS 100-41-4)	TWA	500 ppm	
	TWA	20 ppm	
methylcyclohexane (CAS 108-87-2)	STEL	500 ppm	
	TWA	400 ppm	
n-heptane (CAS 142-82-5)	STEL	500 ppm	
	TWA	400 ppm	
n-hexane (CAS 110-54-3)	TWA	50 ppm	
	TWA	5 mg/m3	Inhalable fraction.
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)	TWA	5 mg/m3	Inhalable fraction.
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	TWA	5 mg/m3	Inhalable fraction.
petrolatum (CAS 8009-03-8)	TWA	5 mg/m3	Inhalable fraction.
toluene (CAS 108-88-3)	TWA	20 ppm	
xylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value
2,2-dimethylbutane (CAS 75-83-2)	STEL	1000 ppm

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

<b>Components</b>	<b>Type</b>	<b>Value</b>
2,3-dimethylbutane (CAS 79-29-8)	TWA	500 ppm
	STEL	1000 ppm
2-methylhexane (CAS 591-76-4)	TWA	500 ppm
	STEL	500 ppm
2-methylpentane (CAS 107-83-5)	TWA	400 ppm
	STEL	1000 ppm
3,3-dimethylpentane (CAS 562-49-2)	TWA	500 ppm
	STEL	500 ppm
3-ethylpentane (CAS 617-78-7)	TWA	400 ppm
	STEL	500 ppm
3-methylhexane (CAS 589-34-4)	TWA	400 ppm
	STEL	500 ppm
3-methylpentane (CAS 96-14-0)	TWA	400 ppm
	STEL	1000 ppm
ethylbenzene (CAS 100-41-4)	TWA	500 ppm
	TWA	20 ppm
methylcyclohexane (CAS 108-87-2)	STEL	500 ppm
n-heptane (CAS 142-82-5)	TWA	400 ppm
	STEL	500 ppm
n-hexane (CAS 110-54-3)	TWA	400 ppm
	TWA	50 ppm
toluene (CAS 108-88-3)	TWA	20 ppm
xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
2,2-dimethylbutane (CAS 75-83-2)	STEL	3500 mg/m3	
		1000 ppm	
	TWA	1760 mg/m3	
		500 ppm	
2,3-dimethylbutane (CAS 79-29-8)	STEL	3500 mg/m3	
		1000 ppm	
	TWA	1760 mg/m3	
		500 ppm	
2-methylpentane (CAS 107-83-5)	STEL	3500 mg/m3	
		1000 ppm	
	TWA	1760 mg/m3	
		500 ppm	
3-methylpentane (CAS 96-14-0)	STEL	3500 mg/m3	
		1000 ppm	
	TWA	1760 mg/m3	
		500 ppm	
ethylbenzene (CAS 100-41-4)	STEL	543 mg/m3	
		125 ppm	
	TWA	434 mg/m3	
		100 ppm	



**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

Components	Type	Value	Form
methylohexane (CAS 108-87-2)	TWA	1610 mg/m3	
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)	TWA	400 ppm 1590 mg/m3	
n-heptane (CAS 142-82-5)	STEL	400 ppm 2050 mg/m3	
	TWA	500 ppm 1640 mg/m3	
n-hexane (CAS 110-54-3)	TWA	400 ppm 176 mg/m3	
		50 ppm	
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
petrolatum (CAS 8009-03-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)	TWA	1590 mg/m3	
		400 ppm	
toluene (CAS 108-88-3)	TWA	188 mg/m3	
		50 ppm	
xylene (CAS 1330-20-7)	STEL	651 mg/m3	
		150 ppm	
	TWA	434 mg/m3	
		100 ppm	

**Biological limit values**

**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
ethylbenzene (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
n-hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*
toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines**

**Canada - Alberta OELs: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

toluene (CAS 108-88-3)

Can be absorbed through the skin.

**Canada - British Columbia OELs: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

**Canada - Manitoba OELs: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

**Canada - Ontario OELs: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

**Canada - Quebec OELs: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

toluene (CAS 108-88-3)

Can be absorbed through the skin.

**Canada - Saskatchewan OELs: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

toluene (CAS 108-88-3)

Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection****Hand protection**

Wear protective gloves such as: Nitrile. Polyvinyl chloride (PVC). Viton rubber (fluor rubber).

**Other**

Wear appropriate chemical resistant clothing.

**Respiratory protection**

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Thermal hazards**

Not available.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance****Physical state**

Liquid.

**Form**

Aerosol.

**Color**

Dark red.

**Odor**

Petroleum.

**Odor threshold**

Not available.

**pH**

Not available.

**Melting point/freezing point**

-244.7 °F (-153.7 °C) estimated

**Initial boiling point and boiling range**

118.4 °F (48 °C) estimated

**Flash point**

&lt; 0 °F (&lt; -17.8 °C) Closed Cup

**Evaporation rate**

Fast.

**Flammability (solid, gas)**

Not available.

**Upper/lower flammability or explosive limits****Flammability limit - lower (%)**

1 % estimated

**Flammability limit - upper (%)**

8 % estimated

**Vapor pressure**

1453.1 hPa estimated

**Vapor density**

Not available.

**Relative density**

0.73

**Solubility(ies)****Solubility (water)**

Not available.

<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	489.2 °F (254 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Percent volatile</b>	86.4 % estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Heat. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong acids. Strong oxidizing agents. Halogens.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	May cause damage to organs through prolonged or repeated exposure by ingestion. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

### Symptoms related to the physical, chemical and toxicological characteristics

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Edema. Jaundice.

### Information on toxicological effects

**Acute toxicity** May be fatal if swallowed and enters airways.

Components	Species	Test Results
3-methylhexane (CAS 589-34-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
ethylbenzene (CAS 100-41-4)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Rat	17.2 mg/l, 4 hours
<b>Oral</b>		
LD50	Rat	3500 mg/kg
heptane, branched, cyclic and linear (CAS 426260-76-6)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 60 mg/l, 4 hours
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
methylcyclohexane (CAS 108-87-2)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
n-heptane (CAS 142-82-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	3000 mg/kg
n-hexane (CAS 110-54-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 1300 mg/kg
<b>Oral</b>		
LD50	Rat	15840 mg/kg
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
petrolatum (CAS 8009-03-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 20 mg/l, 4 hours
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
xylene (CAS 1330-20-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	4300 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Causes skin irritation.  
**Serious eye damage/eye irritation** Causes serious eye irritation.

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Suspected of causing cancer.

**ACGIH Carcinogens**

ethylbenzene (CAS 100-41-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)	A4 Not classifiable as a human carcinogen.
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	A4 Not classifiable as a human carcinogen.
petrolatum (CAS 8009-03-8)	A4 Not classifiable as a human carcinogen.
toluene (CAS 108-88-3)	A4 Not classifiable as a human carcinogen.
xylene (CAS 1330-20-7)	A4 Not classifiable as a human carcinogen.

**Canada - Manitoba OELs: carcinogenicity**

ethylbenzene (CAS 100-41-4)	Confirmed animal carcinogen with unknown relevance to humans.
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)	Not classifiable as a human carcinogen.
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	Not classifiable as a human carcinogen.
petrolatum (CAS 8009-03-8)	Not classifiable as a human carcinogen.
toluene (CAS 108-88-3)	Not classifiable as a human carcinogen.
xylene (CAS 1330-20-7)	Not classifiable as a human carcinogen.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	3 Not classifiable as to carcinogenicity to humans.
toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

<b>Reproductive toxicity</b>	Suspected of damaging fertility.
<b>Specific target organ toxicity - single exposure</b>	May cause drowsiness and dizziness.
<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs (central nervous system, kidney, liver) through prolonged or repeated exposure by ingestion.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.
<b>Chronic effects</b>	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

**12. Ecological information**

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results	
2-methylpentane (CAS 107-83-5)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Daphnia	1 - 10 mg/l, 48 hours
Fish	LC50	Fish	1 - 10 mg/l, 96 hours
ethylbenzene (CAS 100-41-4)			
<b>Aquatic</b>			
Fish	LC50	Atlantic silverside (Menidia menidia)	4.4 - 5.7 mg/l, 96 hours
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	2.1 mg/l, 48 hours
heptane, branched, cyclic and linear (CAS 426260-76-6)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	1.5 mg/l, 48 hours

Components	Species	Test Results
methylcyclohexane (CAS 108-87-2)		
<b>Aquatic</b>		
Fish	LC50	Striped bass ( <i>Morone saxatilis</i> )
		5.8 mg/l, 96 hours
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Daphnia
		1 - 10 mg/l, 48 hours
Fish	LC50	Fish
		1 - 10 mg/l, 96 hours
n-heptane (CAS 142-82-5)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> )
		1.5 mg/l, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> )
		2.1 - 2.98 mg/l, 96 hours
n-hexane (CAS 110-54-3)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> )
		2.101 - 2.981 mg/l, 96 hours
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Daphnia
		> 100 mg/l, 48 hours
solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)		
<b>Aquatic</b>		
Fish	LC50	Rainbow trout,donaldson trout ( <i>Oncorhynchus mykiss</i> )
		8.8 mg/l, 96 hours
		8.8 mg/l, 96 hours
<i>Acute</i>		
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> )
		1.5 mg/l, 48 hours
toluene (CAS 108-88-3)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> )
		6 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon ( <i>Oncorhynchus kisutch</i> )
		5.5 mg/l, 96 hours
xylene (CAS 1330-20-7)		
<b>Aquatic</b>		
Fish	LC50	Rainbow trout,donaldson trout ( <i>Oncorhynchus mykiss</i> )
		9.54 - 19.2 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

2,2-dimethylbutane	3.82
2,3-dimethylbutane	3.42
2-methylpentane	3.74
3-methylpentane	3.6
ethylbenzene	3.15
methylcyclohexane	3.61
n-heptane	4.66
n-hexane	3.9
toluene	2.73
xylene	3.12 - 3.2

**Bioconcentration factor (BCF)**

ethylbenzene	1
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**Bioconcentration factor (BCF)**

naphtha (petroleum), hydrotreated light	10 - 25000
toluene	90
xylene	23.99

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations**

**Disposal of waste from residues / unused products** Contents under pressure. Do not puncture, incinerate or crush. Empty container can be recycled. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** Not regulated.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport information****TDG**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS, flammable, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	80, 107

**IATA**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	10L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

**IMDG**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	F-D, S-U
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

## 15. Regulatory information

### Canadian regulations

#### Controlled Drugs and Substances Act

Not regulated.

#### Export Control List (CEPA 1999, Schedule 3)

Not listed.

#### Greenhouse Gases

Not listed.

#### Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)

ethylbenzene (CAS 100-41-4)

toluene (CAS 108-88-3)

xylene (CAS 1330-20-7)

#### Precursor Control Regulations

toluene (CAS 108-88-3)

Class B

### International regulations

#### Stockholm Convention

Not applicable.

#### Rotterdam Convention

Not applicable.

#### Kyoto protocol

Not applicable.

#### Montreal Protocol

Not applicable.

#### Basel Convention

Not applicable.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
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
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
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)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information

Issue date	01-12-2017
Revision date	10-13-2017
Version #	02
Further information	Control # 793012(1006456)/597P-Q(1002627-1002629)

### Disclaimer

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**Revision Information**

Product and Company Identification: Product and Company Identification  
Composition/information on ingredients: Component information  
Other information: Further information