

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** DEPLOY  
**Recommended use** Lubricant  
**Information on Manufacturer**  
 NATIONAL CHEMSEARCH  
 245 ORENDA RD  
 BRAMPTON ONT L6T 1E7

**Product Code** 5607  
**Chemical Nature** Petroleum distillates mixture  
**Emergency Telephone Number**  
 CHEMTREC® 800-424-9300

## 2. HAZARDS IDENTIFICATION

**Emergency Overview**  
 DANGER  
 Extremely flammable  
 May be harmful if inhaled  
 Causes skin irritation  
 Causes eye irritation  
 Harmful or fatal if swallowed  
 Contents under pressure

**Color** Off-white

**Physical State** Liquid

**Odor** Petroleum distillates

**Potential Health Effects****Principle Route of Exposure**

Skin contact, Eye contact, Inhalation.

**Primary Routes of Entry**

Inhalation, Skin Absorption.

**Acute Effects****Eyes**

Causes eye irritation.

**Skin**

Causes skin irritation. May be absorbed through the skin in harmful amounts.

**Inhalation**

May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

**Ingestion**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Chronic Toxicity**

Repeated and prolonged exposure to solvents may cause brain and nervous system damage. Prolonged or repeated inhalation may cause damage to the lungs. Prolonged skin contact may defat the skin and produce dermatitis. Suspect reproductive hazard - contains material which may injure unborn child. Kidney injury may occur.

**Target Organ Effects**

Respiratory system, Central nervous system, Peripheral Nervous System (PNS), Ears, Skin, Eyes, Kidney.

**Aggravated Medical Conditions**

Respiratory disorders, Skin disorders, Neurological disorders, Kidney disorders.

**Potential Environmental Effects**

See Section 12 for additional Ecological information.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Butane	106-97-8
Hexane	110-54-3
Cyclohexane	110-82-7
Heptane (n-)	142-82-5
Naphtha, petroleum, hydrotreated light	64742-49-0
Solvent naphtha (petroleum), light aliphatic	64742-89-8
Propane	74-98-6
Methyl acetate	79-20-9
Petrolatum	8009-03-8

## 4. FIRST AID MEASURES

**General Advice**

Avoid breathing vapors, mist, or gas. Avoid contact with skin, eyes and clothing.

**Eye Contact**

Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.

**Inhalation**

If inhaled, remove to fresh air. Get medical attention if symptoms occur.

**Ingestion**

Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

**Notes to Physician**

Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Flash Point** 75.2 °F / 24 °C

**Method**

Seta closed cup

**Autoignition Temperature** No information available.

**Flammability Limits in Air % Solvent mixture.**

**Upper** 16

**Lower** 1.05

**Suitable Extinguishing Media**

Foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards arising from the chemical**

Extremely flammable. Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. Flame extension: >18 inches / >46 cm and Burnback: 2 inches / 5 cm. Material can create slippery conditions.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Aerosol Level (NFPA 30B) -** 3

**NFPA**

**Health** 2

**Flammability** 4

**Instability** 0

**HMIS**

**Health** 2

**Flammability** 4

**Instability** 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**

Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

**Environmental Precautions**

Do not flush into surface water or sanitary sewer system.

**Methods for Containment**

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

**Methods for Cleaning Up**

Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.

**Neutralizing Agent**

Not applicable.

## 7. HANDLING AND STORAGE

**Handling**

Keep away from open flames, hot surfaces and sources of ignition. Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes and clothing.

**Storage**

Keep away from heat and sources of ignition. Store in original container. Keep in a dry, cool and well-ventilated place.

**Storage Temperature**

**Minimum** 35 °F / 2 °C

**Maximum** 120 °F / 49 °C

**Storage Conditions**

**Indoor** X **Outdoor**

**Heated**

**Refrigerated**

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH
Butane	: 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4) : 1000 ppm TWA	No data available	: 800 ppm TWA; 1900 mg/m <sup>3</sup> TWA
Hexane	Skin : 1000 ppm STEL (other than n-Hexane) : 50 ppm TWA : 500 ppm TWA (other than n-Hexane)	: 500 ppm TWA; 1800 mg/m <sup>3</sup> TWA	: 1100 ppm IDLH (10% LEL) : 50 ppm TWA; 180 mg/m <sup>3</sup> TWA : 100 ppm TWA (other than n-Hexane); 350 mg/m <sup>3</sup> TWA (other than n-Hexane) : 510 ppm Ceiling (other than n-Hexane, 15 min); 1800 mg/m <sup>3</sup> Ceiling (other than n-Hexane, 15 min)
Cyclohexane	: 100 ppm TWA	: 300 ppm TWA; 1050 mg/m <sup>3</sup> TWA	: 1300 ppm IDLH (10% LEL) : 300 ppm TWA; 1050 mg/m <sup>3</sup> TWA
Heptane (n-)	: 500 ppm STEL (listed under Heptane, all isomers) : 500 ppm STEL : 400 ppm TWA : 400 ppm TWA (listed under Heptane, all isomers)	: 500 ppm TWA; 2000 mg/m <sup>3</sup> TWA	: 750 ppm IDLH : 85 ppm TWA; 350 mg/m <sup>3</sup> TWA : 440 ppm Ceiling (15 min); 1800 mg/m <sup>3</sup> Ceiling (15 min)
Naphtha, petroleum, hydrotreated light	No data available	No data available	No data available
Solvent naphtha (petroleum), light aliphatic	No data available	No data available	No data available
Propane	: 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4) : 1000 ppm TWA	: 1000 ppm TWA; 1800 mg/m <sup>3</sup> TWA	: 2100 ppm IDLH (10% LEL) : 1000 ppm TWA; 1800 mg/m <sup>3</sup> TWA
Methyl acetate	: 250 ppm STEL : 200 ppm TWA	: 200 ppm TWA; 610 mg/m <sup>3</sup> TWA	: 3100 ppm IDLH (10% LEL) : 200 ppm TWA; 610 mg/m <sup>3</sup> TWA 250 ppm STEL; 760 mg/m <sup>3</sup> STEL
Petrolatum	5 mg/m <sup>3</sup> as oil mist	10 mg/m <sup>3</sup> as oil mist	No data available

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment****Eye/Face Protection**

Safety glasses with side-shields.

**Skin Protection**

Wear suitable protective clothing, Impervious gloves.

**Respiratory Protection**

In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**General Hygiene Considerations**

Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid	<b>Viscosity</b>	Non viscous
<b>Color</b>	Off-white	<b>Odor</b>	Petroleum distillates
<b>Appearance</b>	Opaque	<b>pH</b>	Not applicable
<b>Specific Gravity</b>	0.731	<b>Evaporation Rate</b>	53.3 (Butyl acetate=1)
<b>Percent Volatile (Volume)</b>	90.6	<b>VOC Content (%)</b>	48.5
<b>VOC Content (g/L)</b>	355	<b>Vapor Pressure</b>	1891 mmHg @ 70°F
<b>Vapor Density</b>	1.7 (Air = 1.0)	<b>Solubility</b>	Negligible
<b>Boiling Point/Range</b>	134 °F / 57 °C		

## 10. STABILITY AND REACTIVITY

**Chemical Stability**

Stable. Hazardous polymerization does not occur.

**Conditions to Avoid**

Heat, flames, and sparks

**Incompatible Products**

Strong oxidizing agents, Reducing agents, Strong acids, Strong bases.

**Hazardous Decomposition Products**

Carbon oxides

**Possibility of Hazardous Reactions**

None under normal processing

## 11. TOXICOLOGICAL INFORMATION

**Product Information**

No information available.

**Component Information****Acute Toxicity**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Butane	no data available	no data available	= 658 mg/L ( Rat ) 4 h	no data available	no data available
Hexane	= 25 g/kg ( Rat )	= 3000 mg/kg ( Rabbit )	= 48000 ppm ( Rat ) 4 h	no data available	no data available
Cyclohexane	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	= 13.9 mg/L ( Rat ) 4 h	no data available	no data available
Heptane (n-)	no data available	= 3000 mg/kg ( Rabbit )	= 103 g/m <sup>3</sup> ( Rat ) 4 h	no data available	no data available
Naphtha, petroleum, hydrotreated light	> 5000 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	= 73680 ppm ( Rat ) 4 h	no data available	no data available
Solvent naphtha (petroleum), light aliphatic	no data available	= 3000 mg/kg ( Rabbit )	no data available	no data available	no data available
Propane	no data available	no data available	= 658 mg/L ( Rat ) 4 h	no data available	no data available
Methyl acetate	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rat ) > 5000 mg/kg ( Rabbit )	= 16000 ppm ( Rat ) 4 h	no data available	no data available
Petrolatum	no data available	= 3600 mg/kg ( Rabbit )	no data available	no data available	no data available

**Chronic Toxicity**

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Butane	no data available	no data available	no data available	no data available	CNS
Hexane	no data available	no data available	no data available	yes	eyes, CNS, respiratory system, auditory system, skin, PNS
Cyclohexane	no data available	no data available	no data available	no data available	eyes, CNS, kidneys, respiratory system, skin
Heptane (n-)	no data available	no data available	no data available	no data available	skin, CNS, respiratory system
Naphtha, petroleum, hydrotreated light	no data available	no data available	no data available	no data available	no data available
Solvent naphtha (petroleum), light aliphatic	no data available	no data available	no data available	no data available	no data available
Propane	no data available	no data available	no data available	no data available	CNS
Methyl acetate	no data available	no data available	no data available	no data available	eyes, CNS, respiratory system, skin
Petrolatum	no data available	no data available	no data available	no data available	no data available

**Carcinogenicity**

There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Butane	not applicable	not applicable	not applicable	not applicable	not applicable
Hexane	not applicable	not applicable	not applicable	not applicable	not applicable
Cyclohexane	not applicable	not applicable	not applicable	not applicable	not applicable
Heptane (n-)	not applicable	not applicable	not applicable	not applicable	not applicable
Naphtha, petroleum, hydrotreated light	not applicable	not applicable	not applicable	not applicable	not applicable
Solvent naphtha (petroleum), light aliphatic	not applicable	not applicable	not applicable	not applicable	not applicable
Propane	not applicable	not applicable	not applicable	not applicable	not applicable
Methyl acetate	not applicable	not applicable	not applicable	not applicable	not applicable
Petrolatum	not applicable	not applicable	not applicable	not applicable	not applicable

**12. ECOLOGICAL INFORMATION****Product Information**

No information available.

**Component Information**

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Butane	no data available	no data available	no data available	no data available	2.89
Hexane	no data available	LC50 2.1-2.98 mg/L Pimephales promelas 96 h	no data available	> 1000 mg/L 24 h	N/A
Cyclohexane	EC50 > 500 mg/L Desmodesmus subspicatus 72 h	LC50 23.03-42.07 mg/L Pimephales promelas 96 h LC50 24.99-44.69 mg/L Lepomis macrochirus 96 h LC50 3.96-5.18 mg/L Pimephales promelas 96 h LC50 48.87-68.76 mg/L Poecilia reticulata 96 h	EC50 = 85.5 mg/L 5 min EC50 = 93 mg/L 10 min	> 400 mg/L 24 h	3.44
Heptane (n-)	no data available	LC50 = 375.0 mg/L Cichlid fish 96 h	no data available	> 10 mg/L 24 h	4.66
Naphtha, petroleum, hydrotreated light	no data available	no data available	no data available	= 2.6 mg/L 96 h	N/A
Solvent naphtha (petroleum), light aliphatic	EC50 = 4700 mg/L Pseudokirchneriella subcapitata 72 h	no data available	no data available	no data available	N/A
Propane	no data available	no data available	no data available	no data available	2.8
Methyl acetate	EC50 > 120 mg/L Desmodesmus subspicatus 72 h	LC50 250-350 mg/L Brachydanio rerio 96 h LC50 295-348 mg/L Pimephales promelas 96 h	EC50 = 6000 mg/L 16 h EC50 = 6100 mg/L 30 min	= 1026.7 mg/L 48 h	0.18
Petrolatum	no data available	no data available	no data available	no data available	N/A

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

**13. DISPOSAL CONSIDERATIONS****Product Disposal**

Dispose of in accordance with local regulations.

**Container Disposal**

Contents under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal.

**14. TRANSPORT INFORMATION****DOT**

**Proper Shipping Name** Consumer Commodity  
**Hazard Class** ORM-D  
**Description** Consumer Commodity, ORM-D

**TDG**

**Proper shipping name** Consumer Commodity  
**Hazard Class** ORM-D  
**Description** Consumer Commodity, ORM-D

**ICAO**

**UN-No** UN1950  
**Proper Shipping Name** Aerosols  
**Hazard Class** 2.1  
**Shipping Description** UN1950, AEROSOLS, 2.1, LTD QTY

**IATA**

**UN-No** UN1950  
**Proper Shipping Name** Aerosols, flammable  
**Hazard Class** 2.1  
**ERG Code** 10L  
**Shipping Description** UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD QTY

**IMDG/IMO**

**Proper Shipping Name** Aerosols  
**Hazard Class** 2  
**UN-No** UN1950  
**EmS No.** F-D, S-U  
**Shipping Description** UN1950, AEROSOLS, FLAMMABLE, 2.1, (15°C c.c.), LTD QTY

## 15. REGULATORY INFORMATION

## Inventories

TSCA Complies  
 DSL Complies

## U.S. Federal Regulations

## SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Hexane	110-54-3	5-10	1.0 % de minimis concentration
Cyclohexane	110-82-7	1-5	1.0 % de minimis concentration

## SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	Yes	Yes	No

## CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Butane	Not applicable	Not applicable
Hexane	Not applicable	Not applicable
Cyclohexane	Not applicable	Not applicable
Heptane (n-)	Not applicable	Not applicable
Naphtha, petroleum, hydrotreated light	Not applicable	Not applicable
Solvent naphtha (petroleum), light aliphatic	Not applicable	Not applicable
Propane	Not applicable	Not applicable
Methyl acetate	Not applicable	Not applicable
Petrolatum	Not applicable	Not applicable

## Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

## WHMIS Hazard Class

A Compressed gases, B5 Flammable aerosol, D2A Very toxic materials, D2B Toxic materials.



## 16. OTHER INFORMATION

Prepared By Mike McDowell  
 Supersedes Date 01/01/0001  
 Issuing Date 12/28/2010  
 Reason for Revision No information available.  
 Glossary No information available.  
 List of References. No information available.

## NATIONAL CHEMSEARCH

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