

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 12/14/2016 Supersedes: 10/23/2014 Version: 1.1

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

1.1. Product identifier

Product form : Mixture

Trade name : JOHNSEN'S ENGINE DEGREASER 55 GALLON DRUM

Product code : 4644-55

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

Use of the substance/mixture : Engine Degreaser

1.3. Details of the supplier of the safety data sheet

Technical Chemical Company P.O. BOX 139 Cleburne, Texas 76033 T 817-645-6088

1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300, 1-703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 4 H227 Eye Irrit. 2A H319 Carc. 1B H350 Asp. Tox. 1 H304

Full text of H statements: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)





GHS07

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H227 - Combustible liquid

H304 - May be fatal if swallowed and enters airways

H319 - Causes serious eye irritation

H350 - May cause cancer

Precautionary statements (GHS-US) : P201 - Obtain special instructions

P202 - Do not handle until all safety precautions have been read and understood P210 - Keep away from heat,sparks,open flames,hot surfaces. - No smoking

P264 - Wash affected areas thoroughly after handling

P280 - Wear protective gloves, protective clothing, eye protection, face protection P301+P310 - If swallowed: Immediately call a poison control center, doctor, physician,

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P308+P313 - If exposed or concerned: Get medical advice/attention

P331 - Do NOT induce vomiting

P337+P313 - If eye irritation persists: Get medical advice/attention P370+P378 - In case of fire: See Section 5.1 Extinguishing Media

P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with

local, regional, national, international regulations.

2.3. Other hazards

Other hazards not contributing to the classification

: None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

No data available

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SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Distillates (Petroleum), Hydrotreated Light	(CAS No) 64742-47-8	70 - 85	Asp. Tox. 1, H304
Naphtha, Heavy Aromatic	(CAS No) 64742-94-5	<= 13.39	Carc. 1B, H350 Asp. Tox. 1, H304
2-Butoxyethanol	(CAS No) 111-76-2	5 - 10	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
2-Methylnaphthalene	(CAS No) 91-57-6	< 3.4814	Acute Tox. 4 (Oral), H302
Naphthalene	(CAS No) 91-20-3	< 1.8746	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1-Methylnaphthalene	(CAS No) 90-12-0	< 1.67375	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302
Acetone	(CAS No) 67-64-1	< 1	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Polyethylene Glycol 200-600	(CAS No) 25322-68-3	<= 0.0366	Not classified
Nonyl Nonoxynol-5	(CAS No) 9014-93-1	<= 0.0244	Not classified

The exact percentage is a trade secret.

SECTION 4: First aid measures

4.1.	Description	of first a	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.

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.

First-aid measures after eye contact : 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.

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 : May cause cancer.

Symptoms/injuries after inhalation : Coughing. Irritation of the respiratory tract. May cause allergy or asthma symptoms or breathing

difficulties if inhaled. Dizziness.

Symptoms/injuries after skin contact : May cause slight irritation . May cause moderate irritation. Itching. Red skin.

Symptoms/injuries after eye contact : Inflammation/damage of the eye tissue. Irritation of the eye tissue. Redness of the eye tissue.

Causes serious eye irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. May be harmful if swallowed and enters airways.

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

No additional information available

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 : Combustible liquid.

Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Advice for firefighters

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.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures

Remove ignition sources. Use special care to avoid static electric charges. No open flames. No

smokina.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and material for containment and cleaning up 6.3

For containment : Dam up the liquid spill. Contain released substance, pump into suitable containers. Plug the

leak, cut off the supply.

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect Methods for cleaning up

spillage. Store away from other materials.

Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable. Keep away from

heat, sparks, open flames, hot surfaces. - No smoking.

Precautions for safe handling Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Obtain special instructions . Do not handle until all

safety precautions have been read and understood.

Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Hygiene measures

Wash affected areas thoroughly after handling. Always wash hands after handling the product. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash hands and other exposed areas with mild soap and water before eating,

drinking or smoking and when leaving work.

Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations. Proper grounding procedures to avoid static electricity

should be followed.

Keep only in the original container in a cool, well ventilated place away from : Keep container Storage conditions

closed when not in use. Keep in fireproof place.

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight. Heat sources.

Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

Control parameters

Benzene (71-43-2)		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	5 ppm
USA ACGIH	ACGIH Ceiling (ppm)	25 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	1 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	5 ppm

Distillates (Petroleum), Hydrotreated Light (64742-47-8)

USA ACGIH	ACGIH TWA (ppm)	200 ppm 8 Hours
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2-Butoxyethanol (111-76-2)		
USA ACGIH	ACGIH TWA (mg/m³)	97 mg/m³
USA ACGIH	ACGIH TWA (ppm)	20 ppm (2-Butoxyethanol (EGBE); USA; Time- weighted average exposure limit 8 h; TLV - Adopted Value)

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2-Butoxyethanol (111-76-2)		
USA OSHA	OSHA PEL (TWA) (mg/m³)	240 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	50 ppm
1-Methylnaphthalene (90-12-	0)	
USA ACGIH	ACGIH TWA (ppm)	0.5 ppm (1-methylnaphthalene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
2-Methylnaphthalene (91-57-	6)	
USA ACGIH	ACGIH TWA (ppm)	0.5 ppm (2-methylnaphthalene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Naphtha, Heavy Aromatic (6	4742-94-5)	
USA ACGIH	ACGIH TWA (mg/m³)	25 mg/m³ 1-METHYLNAPHTHALENE
USA ACGIH	ACGIH TWA (ppm)	0.5 ppm 1-METHYLNAPHTHALENE
Acetone (67-64-1)		
USA ACGIH	ACGIH TWA (mg/m³)	1188 mg/m³
USA ACGIH	ACGIH TWA (ppm)	500 ppm
USA ACGIH	ACGIH STEL (mg/m³)	1782 mg/m³
USA ACGIH	ACGIH STEL (ppm)	750 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	2400 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
8.2. Exposure controls		

: Ensure good ventilation of the work station. Ensure good ventilation of the work station. Appropriate engineering controls

Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.





Materials for protective clothing : GIVE EXCELLENT RESISTANCE:

Hand protection Wear protective gloves.

Eye protection Chemical goggles or safety glasses. Skin and body protection Wear suitable protective clothing. Respiratory protection : Wear respiratory protection.

Consumer exposure controls : Avoid contact during pregnancy/while nursing.

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

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties 9.1.

Physical state : Liquid Appearance : Liquid.

Color : Colourless to light yellow. Odor : Aromatic . Strong odour. Odor threshold : No data available : No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available Freezing point : No data available : 160 - 343 °C Boiling point : 62.7 °C Flash point

Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapor pressure : No data available

Relative vapor density at 20 °C : > 4.7 Relative density : 0.88

Solubility : Poorly soluble in water.

Water: 25 %

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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
Oxidizing properties : No data available
Explosion limits : No data available

9.2. Other information

VOC content : < 10 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Combustible liquid. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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Benzene (71-43-2)	
LD50 oral rat	> 930 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; > 2000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 8240 mg/kg (Rabbit; Experimental value; 21 CFR 191.10; > 9.4; Rabbit)
LC50 inhalation rat (mg/l)	43.767 mg/l/4h (Rat; Experimental value)
LC50 inhalation rat (ppm)	13700 ppm/4h (Rat; Experimental value)
Distillates (Petroleum), Hydrotreated Light (64	1742-47-8)
LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.28 mg/l/4h Based on lack of mortality and systemic effects
2-Butoxyethanol (111-76-2)	
LD50 oral rat	1300 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LD50 dermal rabbit	435 mg/kg (435 mg/kg bodyweight; Rabbit; Rabbit; Experimental value,435 mg/kg bodyweight; Rabbit; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	2.17 mg/l/4h (Rat; Experimental value; 2.35 mg/l/4h; Rat; Experimental value)
LC50 inhalation rat (ppm)	450-486,Rat; Weight of evidence
Polyethylene Glycol 200-600 (25322-68-3)	
LD50 oral rat	> 15000 mg/kg (Rat)
LD50 dermal rabbit	> 20000 mg/kg (Rabbit)
1-Methylnaphthalene (90-12-0)	
LD50 oral rat	1840 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit; Literature study)
2-Methylnaphthalene (91-57-6)	
LD50 oral rat	1630 mg/kg (Rat)
Naphthalene (91-20-3)	
ATE CLP (oral)	500.000 mg/kg body weight

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Nonblike Heavy Aremetic (CATA) 04 5)		
Naphtha, Heavy Aromatic (64742-94-5)	F000 (l. v. (D-1)	
LD50 oral rat	> 5000 mg/kg (Rat)	
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)	
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (Rat)	
Acetone (67-64-1)		
LD50 oral rat	5800 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)	
LD50 dermal rabbit	20000 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402)	
LC50 inhalation rat (mg/l)	71 mg/l/4h (Rat; Experimental value; 76 mg/l/4h; Rat; Experimental value)	
LC50 inhalation rat (ppm)	30000 ppm/4h (Rat; Experimental value)	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitization	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: May cause cancer.	
Benzene (71-43-2)		
IARC group	1	
2-Butoxyethanol (111-76-2)		
IARC group	3	
Naphtha, Heavy Aromatic (64742-94-5)		
IARC group	2B	
National Toxicology Program (NTP) Status	3	
Reproductive toxicity	: Not classified	
Specific target organ toxicity (single exposure)	: Not classified	
Specific target organ toxicity (repeated	: Not classified	
exposure)		
Aspiration hazard	: May be fatal if swallowed and enters airways.	
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.	
Symptoms/injuries after inhalation	: Coughing. Irritation of the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Dizziness.	
Symptoms/injuries after skin contact	: May cause slight irritation . May cause moderate irritation. Itching. Red skin.	
Symptoms/injuries after eye contact	: Inflammation/damage of the eye tissue. Irritation of the eye tissue. Redness of the eye tissue. Causes serious eye irritation.	
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. May be harmful if swallowed and enters airways.	
Symptoms/injuries after ingestion SECTION 12: Ecological information	: May be fatal if swallowed and enters airways. May be harmful if swallowed and enters airways.	

12.1. Toxicity

Departs (74.42.9)	
Benzene (71-43-2)	
LC50 fish 1	5.3 mg/l (LC50; 96 h; Salmo gairdneri)
EC50 Daphnia 2	10 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna)
Threshold limit algae 1	100 mg/l (ErC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
Acetone (67-64-1)	
EC50 Daphnia 2	12600 mg/l (LC50; Other; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Polyethylene Glycol 200-600 (25322-68-3	
LC50 fish 2	> 5000 mg/l (LC50; 24 h)
Threshold limit algae 2	500 mg/l (EC0; 720 h)
1-Methylnaphthalene (90-12-0)	
LC50 fish 1	8.4 mg/l (LC50; 48 h; Salmo fario)
EC50 Daphnia 1	1.848 mg/l (LC50; 48 h)
LC50 fish 2	9 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 2	1.2 mg/l (EC50; 48 h)
Threshold limit algae 1	1.71 - 5.12,EC50; 3 h
Threshold limit algae 2	1200 μg/l (EC50; 14 days)
2-Methylnaphthalene (91-57-6)	
LC50 fish 1	8 mg/l (LC50; 96 h)

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Naphtha, Heavy Aromatic (64742-94-5)	
EC50 Daphnia 1	0.95 mg/l (EC50; 48 h)
LC50 fish 2	2.34 mg/l (LC50; 96 h; Oncorhynchus mykiss)
Threshold limit algae 2	2.5 mg/l (EC50; 72 h)
Acetone (67-64-1)	
LC50 fish 1	6210 mg/l (96 h; Pimephales promelas; Nominal concentration)
EC50 Daphnia 1	8800 mg/l (48 h; Daphnia pulex)
LC50 fish 2	5540 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
TLM fish 1	13000 ppm (96 h; Gambusia affinis; Turbulent water)
TLM fish 2	> 1000 ppm (96 h; Pisces)
Threshold limit other aquatic organisms 1	3000 mg/l (Plankton)
Threshold limit other aquatic organisms 2	28 mg/l (Protozoa)
Threshold limit algae 1	7500 mg/l (Scenedesmus quadricauda; pH = 7)
Threshold limit algae 2	3400 mg/l (48 h; Chlorella sp.)
12.2. Persistence and degradability	
JOHNSEN'S ENGINE DEGREASER 55 GAL	LON DRIIM
Persistence and degradability	Not established.
<u> </u>	1101 GOLADIIGIIGA
Benzene (71-43-2)	Deadle blade medicible in control Occapitation in 1971 1971
Persistence and degradability	Readily biodegradable in water. Ozonation in water. Forming sediments in water. Biodegradable in the soil. Low potential for adsorption in soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	2.18 g O ₂ /g substance
Chemical oxygen demand (COD)	2.15 g O ₂ /g substance
ThOD	3.10 g O ₂ /g substance
BOD (% of ThOD)	0.70
Distillates (Petroleum), Hydrotreated Light	(64742-47-8)
Persistence and degradability	Not established.
Acetone (67-64-1)	
Persistence and degradability	Not established.
2-Butoxyethanol (111-76-2)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.71 g O ₂ /g substance
Chemical oxygen demand (COD)	2.20 g O ₂ /g substance
ThOD	2.305 g O ₂ /g substance
BOD (% of ThOD)	0.31
Polyethylene Glycol 200-600 (25322-68-3)	
Persistence and degradability	Biodegradability in water: no data available. Not established.
<u> </u>	Blodegradability in water. No data available. Not established.
Nonyl Nonoxynol-5 (9014-93-1)	
Persistence and degradability	Not established.
1-Methylnaphthalene (90-12-0)	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water.
2-Methylnaphthalene (91-57-6)	
Persistence and degradability	Inherently biodegradable. Not readily biodegradable in water.
Naphthalene (91-20-3)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Naphtha, Heavy Aromatic (64742-94-5)	
Persistence and degradability	Not readily biodegradable in water.
•	1401 readily biodegradable iii water.
Acetone (67-64-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test)data on mobility of the substance available. Not established.
Biochemical oxygen demand (BOD)	1.43 g O ₂ /g substance
Chemical oxygen demand (COD)	1.92 g O ₂ /g substance
ThOD	2.20 g O ₂ /g substance
BOD (% of ThOD)	(20 day(s)) 0.872
12.3. Bioaccumulative potential	
JOHNSEN'S ENGINE DEGREASER 55 GAL	LON DRUM
Bioaccumulative potential	Not established.
Dioaccumulativo potential	Total Collaboration

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Benzene (71-43-2)		
BCF fish 1	19 (BCF)	
BCF fish 2	< 10 (BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; 3 days; Leuciscus idus;	
	Flow-through system; Fresh water; Experimental value)	
BCF other aquatic organisms 1	30 (BCF; 24 h; Chlorella sp.)	
Log Pow	2.13 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
Distillates (Petroleum), Hydrotreated Light (64	4742-47-8)	
Bioaccumulative potential	Not established.	
Acetone (67-64-1)		
Bioaccumulative potential	Not established.	
2-Butoxyethanol (111-76-2)		
Log Pow	0.81 (Experimental value; BASF test; 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
Polyethylene Glycol 200-600 (25322-68-3)		
Log Pow	-1.2	
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.	
<u>'</u>		
Nonyl Nonoxynol-5 (9014-93-1) Bioaccumulative potential	Not established.	
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1-Methylnaphthalene (90-12-0)		
BCF fish 1	20 (BCF; 5 weeks)	
BCF fish 2	113-2000,BCF; 1 - 2 weeks	
Log Pow	3.87 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
2-Methylnaphthalene (91-57-6)		
BCF fish 1	407 (BCF; 624 h; Lepomis macrochirus)	
BCF fish 2	190 (BCF; 840 h; Oncorhynchus kisutch)	
Log Pow	3.86 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
Naphthalene (91-20-3)		
Bioaccumulative potential	Not established.	
Naphtha, Heavy Aromatic (64742-94-5)		
Log Pow	2.9 - 6.1	
Bioaccumulative potential	Bioaccumable.	
Acetone (67-64-1)		
BCF fish 1	0.69 (Pisces)	
BCF other aquatic organisms 1	3	
Log Pow	-0.24 (Test data)	
Bioaccumulative potential	Not bioaccumulative. Not established.	
2.4. Mobility in soil		
Benzene (71-43-2) Surface tension	0.029 N/m (20 °C)	
	Koc,134.1; QSAR	
Log Koc	NOU, 104. 1, WOMN	
2-Butoxyethanol (111-76-2)		
Surface tension	0.027 N/m (25 °C)	
1-Methylnaphthalene (90-12-0)		
Log Koc	Koc,2300	
Acetone (67-64-1)		
Surface tension	0.0237 N/m (20 °C)	
12.5. Other adverse effects		
Other information : Avoid release to the environment.		
SECTION 13: Disposal considerations		

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional,

national, international regulations.

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Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

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

US DOT (ground): Not Regulated, ICAO/IATA (air): Not Regulated, IMO/IMDG (water): Not Regulated,

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not Regulated

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

JOHNSEN'S ENGINE DEGREASER 55 GALLON DRUM	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard
	Immediate (acute) health hazard

Benzene (71-43-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

Distillates (Petroleum), Hydrotreated Light (64742-47-8)

SARA Section 311/312 Hazard Classes Immediate (acute) health hazard Delayed (chronic) health hazard

2-Butoxyethanol (111-76-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

SARA Section 311/312 Hazard Classes

Immediate (acute) health hazard
Delayed (chronic) health hazard
Fire hazard

Naphthalene (91-20-3)

SARA Section 311/312 Hazard Classes

Delayed (chronic) health hazard
Immediate (acute) health hazard

Naphtha, Heavy Aromatic (64742-94-5)

Subject to reporting requirements of United States SARA Section 313

SARA Section 311/312 Hazard Classes

Delayed (chronic) health hazard

SARA Section 313 - Emission Reporting

14 % Naphthalene (CAS 91-20-3)

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

Acetone (67-64-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313

SARA Section 311/312 Hazard Classes

Immediate (acute) health hazard
Fire hazard

Delayed (chronic) health hazard

15.2. International regulations

CANADA

JOHNSEN'S ENGINE DEGREASER 55 GALLON DRUM	
WHMIS Classification	Class B Division 3 - Combustible Liquid

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Benzene (71-43-2)		
Listed on the Canadian DSL (Domestic Substances List)		
Distillates (Petroleum), Hydrotreated Light (64742-47-8)		
Listed on the Canadian DSL (Domestic Substances List)		
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria	
2-Butoxyethanol (111-76-2)		
Listed on the Canadian DSL (Domestic Substances List)		
Naphthalene (91-20-3)		
WHMIS Classification	Class B Division 4 - Flammable Solid Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects	
Naphtha, Heavy Aromatic (64742-94-5)		
Acetone (67-64-1)		
Listed on the Canadian DSL (Domestic Substances List)		
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects	

EU-Regulations

2-Butoxyethanol (111-76-2)

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

Naphtha, Heavy Aromatic (64742-94-5)

Acetone (67-64-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)- Directive 79/831/EEC, sixth Amendment of Directive 67/548/EEC (dangerous substances)

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

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

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

Carc.Cat.3; R40 Xi; R38 N; R51/53

Full text of R-phrases: see section 16

15.2.2. National regulations

Benzene (71-43-2)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

2-Butoxyethanol (111-76-2)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Korean ECL (Existing Chemicals List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Naphtha, Heavy Aromatic (64742-94-5)

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 Canadian NDSL (Non-Domestic Substances List)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Acetone (67-64-1)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

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15.3. US State regulations				
JOHNSEN'S ENGINE DEG		JM		
U.S California - Propositio	on 65 - Carcinogens List	No		
U.S California - Proposition Toxicity	on 65 - Developmental	No		
U.S California - Propositio Toxicity - Female	on 65 - Reproductive	No		
U.S California - Propositio Toxicity - Male	on 65 - Reproductive	No		
State or local regulations		U.S California - Proposition	65	
Benzene (71-43-2)				
U.S California - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	Non-significant risk level (NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity - Male	
Yes	Yes	No	Yes	
Distillates (Petroleum), Hy	drotreated Light (64742-47	7-8)		
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
No	No	No	No	
Acetone (67-64-1)				
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
No	No	No	No	
2-Butoxyethanol (111-76-2	2)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
No	No	No	No	
Polyethylene Glycol 200-6	00 (25322-68-3)			
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
No	No	No	No	
Nonyl Nonoxynol-5 (9014-	93-1)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
No	No	No	No	
1-Methylnaphthalene (90-1	12-0)		<u> </u>	
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
No	No	No	No	
2-Methylnaphthalene (91-5	57-6)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
No	No	No	No	
	1	I	1	I

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Naphthalene (91-20-3)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	No	No	
Naphtha, Heavy Aroma	atic (64742-94-5)	<u> </u>	<u> </u>	·
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	Yes	Yes	
Acetone (67-64-1)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	No	No	
		•		

Benzene (71-43-2)

State or local regulations

U.S. - California - Proposition 65

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

New Jersey Right-to-Know

2-Butoxyethanol (111-76-2)

State or local regulations

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

U.S. - New Jersey - Right to Know Hazardous Substance List

Naphthalene (91-20-3)

State or local regulations

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

U.S. - Massachusetts - Right To Know List

U.S. - California - Proposition 65

Naphtha, Heavy Aromatic (64742-94-5)

State or local regulations

U.S. - California - Proposition 65

Illinois Right to Know

Louisiana Right to Know

Michigan Right to Know

Minnesota Right-to-Know

New Jersey Right-to-Know

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

Rhode Island Right to Know

Acetone (67-64-1)

State or local regulations

U.S. - California - Proposition 65

Benzene 71-43-2

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

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

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

o p	
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H350	May cause cancer

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H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

NFPA health hazard : 2 - Intense or continued exposure could cause temporary

incapacitation or possible residual injury unless prompt

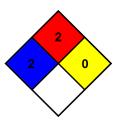
medical attention is given.

NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high

temperature before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 2 Moderate Hazard Physical : 0 Minimal Hazard

Personal Protection

SDS US (GHS HazCom 2012) - TCC

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

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