



Safety Data Sheet

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Diesel Force Diesel EGR & Induction System Cleaner

SDS Number: DF620
DF630

1 PRODUCT AND COMPANY INFORMATION

Product Name: Diesel Force Diesel EGR & Induction System Cleaner
Revision Date: 09/26/2016
SDS Number: DF620
DF630
Common Name: Diesel EGR and Induction System Cleaner
CAS Number: Blend
Product Code: DF620
DF630
Synonyms: Water Based System Cleaner

Company Identification:

Supplier:
LYDEN OIL COMPANY
30682 Tracy Road
Walbridge, OH 43465
www.lydenoil.com

For Product Information: 1-800-245-9336
For Emergencies: 1-800-424-9300 (CHEMTREC)

2 HAZARDS IDENTIFICATION



Signal Word:

Danger



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Diesel Force Diesel EGR & Induction System Cleaner

SDS Number: DF620
DF630

Hazard Classes/Categories:

Skin corrosive, Category 1B.
Serious eye damage, Category 1.
Corrosive to metals, Category 1.
Carcinogen, Category 2.

Hazard Statement(s):

H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H290: May be corrosive to metals.
H351: Suspected of causing cancer.

Precaution Statement(s):

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.
P201: Obtain special instructions before use.
P264: Wash ... thoroughly after handling.
P261: Avoid breathing dust/fumes/gas/mist/vapors/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P337+313: If eye irritation persists get medical advice/attention.
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+311: IF exposed or concerned: Call a POISON CENTER/ doctor.
P405: Store locked up.
P501: Dispose of contents/container in accordance with local/regional/national/international regulation.



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Other Hazard Statement(s):

-NFPA Ratings:
Health = 3
Fire = 0
Reactivity = 0

Caution: CAUSTIC SOLUTION, Avoid contact with eyes/skin.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:

Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS Number	Percentage
Sodium Hydroxide	1310-73-2	1-2
Nitrilotriacetic acid trisodium salt monohydrate	18662-53-8	0.1-1

**Any concentration shown as a range is to protect confidentiality or is due to batch variation.*

4 FIRST AID MEASURES

Description of First Aid Measures:

Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim has difficulty breathing or is unresponsive, give oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.

Skin Contact:

Flush skin with water, wash with soap and water. Remove contaminated clothing. Do not reuse clothing until cleaned. Get medical attention if skin irritation occurs or if otherwise needed.

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 attention.



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Ingestion:

Rinse mouth with water. Drink copious amounts of water and DO NOT induce vomiting. Obtain medical attention.

Symptoms and Effects, both acute and delayed:

-Most important symptoms and effects, both acute and delayed:
Corrosive to skin and eyes. Will cause nausea and vomiting.
Irritating to mouth, throat and stomach.
-Indication of any immediate medical attention and special treatment needed:
No further relevant information available.

Recommended Actions:

Treat symptomatically. Call a doctor or poison control center for guidance.

5	FIRE FIGHTING MEASURES
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Recommended Fire-Extinguishing Equipment:

Use dry powder, foam, or carbon dioxide fire extinguishers. Water may be ineffective in fighting an oil fire unless used by experienced fire fighters.

Possible Hazards During a Fire:

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Recommendations to Firefighters:

Proper protective equipment including breathing apparatus.



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6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid breathing vapors.
Personal protective equipment must be worn.
Avoid contact with skin, eyes or clothing.
Remove persons from danger area.

Emergency Procedures:

Contain spilled material, collect in suitable and properly labeled containers.

Environmental Precautions:

Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.

Cleanup Procedures:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 HANDLING AND STORAGE

Handling Precautions:

Use good personal hygiene practices
Avoid contact with the eyes and skin.
Avoid contact with clothing.
Use only in well ventilated areas.
Avoid splashes or spray in enclosed areas.

Storage Requirements:

Keep container tightly sealed. Store only in original container.
Keep away from sources of ignition.



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8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

-1310-73-2 Sodium Hydroxide (1-2%):

TLV - CEV: 2 mg/m³

PEL – TWA: 2 mg/m³

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Eyewash station and safety shower should be available.

Personal Protective Equipment:

-General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Wear gloves and safety glasses/goggles.
-Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

9 PHYSICAL AND CHEMICAL PROPERTIES

Color:	Amber
Physical State:	Liquid
Odor:	Mild
Odor Threshold:	Data not available
pH:	12.5-13.8
Melting Point:	Data not available
Boiling Point:	Data not available
Boiling Range:	Data not available
Flash Point:	Data not available
Evaporation Rate:	Data not available



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Flammability:	Data not available
Flammability Limits:	Data not available
Vapor Pressure:	Data not available
Vapor Density:	Data not available
Relative Density:	1.02 g/cm ³ (8.512 lbs/gal)
Solubilities:	Fully miscible with water
Partition Coefficient:	Data not available
Auto-Ignition Temperature:	Data not available
Decomposition Temperature:	Data not available
Viscosity:	Data not available

10 STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Reactivity: Not reactive under normal conditions.

Conditions to Avoid: No further relevant information available.

Hazardous Reactions: No known hazardous reactions.

Incompatible Materials: Acids

Decomposition Products: Hazardous decomposition products are not expected to form.

11 TOXICOLOGICAL INFORMATION

Routes of Exposure: Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.



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Exposure Effects:

Corrosive to skin and mucous membranes.
Corrosive to eyes.

Measures of Toxicity:

EGR and Induction System Cleaner:

Oral LD50: 29851 mg/kg (ATE)

1310-73-2 Sodium Hydroxide:

Oral LD50: 2000 mg/kg (rat)

18662-53-8 Nitrilotriacetic acid trisodium salt monohydrate:

Oral LD50: 100 mg/kg (ATE)

Carcinogenic/Mutagenic Precautions:

Nitrilotriacetic acid trisodium salt monohydrate:
Carcinogenic category 2B (IARC).

12 ECOLOGICAL INFORMATION

Ecological Precautions:

Avoid exposing to the environment.

Ecological Effects:

1310-73-2 Sodium Hydroxide:

LC50 (48 hours): 125 mg/L (fish)

13 DISPOSAL CONSIDERATIONS

Disposal Methods:

Dispose of waste material in accordance with all local, state, and federal requirements.



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Disposal Containers:

Use properly approved container for disposal.

Special Precautions:

Do not dispose of with household garbage.
Do not flush to surface waters or drains.

14 TRANSPORT INFORMATION

UN Number: UN3266
UN Shipping Name: Corrosive liquid, basic, inorganic, n.o.s. (Sodium hydroxide)
Transport Hazard Class: 8
Packing Group: II

Environmental Hazards:

Not a marine pollutant

Bulk Transport Guidance:

Data not available

Special Precautions:

Placard: CORROSIVE (non-limited quantities with gross weight over 1,001 pounds) DOT quantity limitations of 5L on passenger aircraft or rail, and 60L on cargo aircraft.

15 REGULATORY INFORMATION

This material and all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substances Control Act.

California Proposition 65 WARNING: This product contains measurable amounts of a chemical known to the State of California to cause cancer. (Nitrilotriacetic acid trisodium salt monohydrate)



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OTHER INFORMATION

Last Revision Date: 09/26/2016

The information contained in this Safety Data Sheet (SDS) relates only to the specific material designated. The supplier assumes no legal responsibility of the use or reliance upon this data. This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of the supplier.



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Diesel Force Diesel Injector Cleaner

SDS Number: DF670
DF690

1 PRODUCT AND COMPANY INFORMATION

Product Name: Diesel Force Diesel Injector Cleaner
Revision Date: 09/26/2016
SDS Number: DF670
DF690
Common Name: Solvated petroleum distillates
CAS Number: Blend
Product Code: DF670
DF690
Synonyms: Injector systems cleaner

Company Identification:

Supplier:
LYDEN OIL COMPANY
30682 Tracy Road
Walbridge, OH 43465
www.lydenoil.com

For Product Information: 1-800-245-9336
For Emergencies: 1-800-424-9300 (CHEMTREC)

2 HAZARDS IDENTIFICATION



Signal Word:

DANGER



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Diesel Force Diesel Injector Cleaner

SDS Number: DF670
DF690

Hazard Classes/Categories:

Flammable liquid, Category 3.
Acute toxicity, Inhalation category 4.
Skin irritant, Category 2.
Serious eye irritation, Category 2A.
Germ cell mutagen, Category 1B.
Carcinogen, Category 1B.
Aspiration hazard, Category 1.
Hazardous to the aquatic environment, Category chronic 3.

Hazard Statement(s):

H226: Flammable liquid and vapor.
H332: Harmful if inhaled.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H340: May cause genetic defects.
H350: May cause cancer.
H304: May be fatal if swallowed and enters airways.
H412: Harmful to aquatic life with long-lasting effects.

Precaution Statement(s):

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.
P201: Obtain special instructions before use.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241: Use explosion-proof electrical/ventilating/light/equipment.
P261: Avoid breathing dust/fumes/gas/mist/vapors/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P233: Keep container tightly closed.
P242: Use only non-sparking tools.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.



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Diesel Force Diesel Injector Cleaner

SDS Number: DF670
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P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P363: Wash contaminated clothing before reuse.
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405: Store locked up.
P403+235: Store in a well ventilated place. Keep cool.
P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazard Statement(s):

-NFPA Ratings:
Health = 1
Fire = 2
Reactivity = 3

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:

Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS Number	Percentage
Distillates (petroleum), hydrotreated light	64742-47-8	25-50
2-ethylhexyl nitrate	27247-96-7	10-25
2-butoxyethanol	111-76-2	10-20
Solvent naphtha (petroleum), heavy arom.	64742-94-5	2.5-10
Solvent naphtha (petroleum), light arom.	64742-95-6	2.5-10
Xylene	1330-20-7	1-2.5
1,2,4-trimethylbenzene	95-63-6	1-2.5
Benzene, ethylenated, residues, distn. Lights	178535-25-6	1-2.5
Ethylbenzene	100-41-4	0.1-1

**Any concentration shown as a range is to protect confidentiality or is due to batch variation.*



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Diesel Force Diesel Injector Cleaner

SDS Number: DF670
DF690

4 FIRST AID MEASURES

Description of First Aid Measures:

Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim has difficulty breathing or is unresponsive, give oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.

Skin Contact:

Flush skin with water, wash with soap and water. Remove contaminated clothing. Do not reuse clothing until cleaned. Get medical attention if skin irritation occurs or if otherwise needed.

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 attention.

Ingestion:

DO NOT induce vomiting. Obtain medical attention.

Symptoms and Effects, both acute and delayed:

-Most important symptoms and effects, both acute and delayed:

Headache

Dizziness

May cause nose, throat, and lung irritation.

May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Repeated exposure to this material can result in absorption through skin causing significant health hazard.

Harmful if swallowed. May be fatal if swallowed and enters airways. Swallowing a small quantity of this material will result in serious health hazard.

Irritating to skin and eyes. Could cause dermatitis.

Will cause nausea and vomiting.



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-Indication of any immediate medical attention and special treatment needed:
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Recommended Actions:

Treat symptomatically. Call a doctor or poison control center for guidance.

5 FIRE FIGHTING MEASURES

Recommended Fire-Extinguishing Equipment:

Use dry powder, foam, or carbon dioxide fire extinguishers. Do not use water.

Possible Hazards During a Fire:

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Recommendations to Firefighters:

Proper protective equipment including breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid breathing vapors.
Personal protective equipment must be worn.
Avoid contact with skin, eyes or clothing.
Remove persons from danger area.



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Diesel Force Diesel Injector Cleaner

SDS Number: DF670
DF690

Emergency Procedures:

Contain spilled material, collect in suitable and properly labeled containers.

Environmental Precautions:

Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.

Cleanup Procedures:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 HANDLING AND STORAGE

Handling Precautions:

Keep receptacles tightly sealed.
Open and handle receptacle with care.
Use only in well ventilated areas.
Avoid contact with the eyes and skin.
Avoid contact with clothing.
Avoid splashes or spray in enclosed areas.

Storage Requirements:

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges. Protect from heat.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

-111-76-2 2-butoxyethanol (10-20%):
PEL TWA: 240 mg/m³, 50 ppm
Skin
REL TWA: 24 mg/m³, 5 ppm
Skin
TLV TWA: 97 mg/m³, 20 ppm
BEI



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-1330-20-7 xylene (1-2.5%):

PEL TWA: 435 mg/m³, 100 ppm

REL STEL: 655 mg/m³, 150 ppm

TWA: 435 mg/m³, 100 ppm

TLV STEL: 651 mg/m³, 150 ppm

TWA: 434 mg/m³, 100 ppm

BEI

-95-63-6 1,2,4-trimethylbenzene (1-<2.5%):

REL TWA: 125 mg/m³, 25 ppm

TLV TWA: 123 mg/m³, 25 ppm

• Ingredients with biological limit values:

-111-76-2 2-butoxyethanol (10-<20%):

BEI 200 mg/g creatinine

Medium: urine

Time: end of shift

Parameter: Butoxyacetic acid with hydrolysis

-1330-20-7 xylene (1-2.5%):

BEI 1.5 g/g creatinine

Medium: urine

Time: end of shift

Parameter: Methylhippuric acids

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94).

Personal Protective Equipment:

-General protective and hygienic measures:
Wash hands before breaks and at the end of work.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin. Wear gloves and goggles.

-Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.



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Diesel Force Diesel Injector Cleaner

SDS Number: DF670
DF690

9 PHYSICAL AND CHEMICAL PROPERTIES

Color:	Amber
Physical State:	Liquid
Odor:	Sweet
Odor Threshold:	Data not available
pH:	Data not available
Melting Point:	Data not available
Boiling Point:	171° C / 340° F
Boiling Range:	Data not available
Flash Point:	43° C / 109° F
Evaporation Rate:	Data not available
Flammability:	Data not available
Flammability Limits:	Data not available
Vapor Pressure:	2 mmHg at 20° C
Vapor Density:	Data not available
Relative Density:	0.8 g/cm ³ (6.676 lbs/gal)
Solubilities:	Insoluble in water
Partition Coefficient:	Data not available
Auto-Ignition Temperature:	Data not available
Decomposition Temperature:	Data not available
Viscosity:	Data not available

10 STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Reactivity:

Not reactive under normal conditions.

Conditions to Avoid:

Extreme temperature, sparks, open flame, and direct sunlight.

Hazardous Reactions:

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.



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Diesel Force Diesel Injector Cleaner

SDS Number: DF670
DF690

Incompatible Materials:

Strong oxidizers.

Decomposition Products:

Oxides of carbon.

11	TOXICOLOGICAL INFORMATION
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Routes of Exposure:

Inhalation, skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Exposure Effects:

- On the skin: Irritant to skin and mucous membranes.
- On the eye: Irritating effect.
- Inhalation:
Do not inhale , can cause respiratory system irritation.
Asphyxiation

Measures of Toxicity:

Diesel Fuel Injector Cleaner:
Oral LD50 2234 mg/kg
Dermal LD50 1800 mg/kg
Inhalative LC50/4 h 11.1 mg/l

2 7247-96-7 2-ethylhexyl nitrate:
Oral LD50 500 mg/kg (ATE)
Dermal LD50 1100 mg/kg (ATE)
Inhalative LC50/4 h 11 mg/l (ATE)

111-76-2 2-butoxyethanol:
Oral LD50 470 mg/kg (rat)
Dermal LD50 400 mg/kg (rab)
Inhalative LC50/4 h 2.2 mg/l (rat)



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Diesel Force Diesel Injector Cleaner

SDS Number: DF670
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64742-95-6 Solvent naphtha (petroleum), light arom.:
Oral LD50 >6800 mg/kg (rat)
Dermal LD50 >3400 mg/kg (rab)
Inhalative LC50/4 h >10.2 mg/l (rat)

1330-20-7 xylene:
Oral LD50 4300 mg/kg (rat)
Dermal LD50 2000 mg/kg (rabbit)
Inhalative LC50/4 h 6700 mg/l (rat)

95-63-6 1,2,4-trimethylbenzene:
Oral LD50 5000 mg/kg (rat)
Inhalative LC50/4 h 18 mg/l (rat)

178535-25-6 Benzene, ethylenated, residues, distn.
Lights:
Oral LD50 >2000 mg/kg (rat)

100-41-4 ethylbenzene:
Oral LD50 3500 mg/kg (rat)
Dermal LD50 17800 mg/kg (rabbit)
Inhalative LC50/4 h 17.8 mg/l (rat)

Carcinogenic/Mutagenic Precautions:

2-butoxyethanol: Carcinogenic category 3 (IARC).
Xylene: Carcinogenic category 3 (IARC).
Ethylbenzene: Carcinogenic category 2B (IARC).
Naphthalene: Carcinogenic category 2B (IARC).
Cumene: Carcinogenic category 2B (IARC).

12

ECOLOGICAL INFORMATION

Ecological Precautions:

Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.



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SDS Number: DF670
DF690

Ecological Effects:

-111-76-2 2-butoxyethanol:
EC50 (48 h) >1000 mg/L (daphnia)
LC50 (96 h) (static) 1490 mg/l (Lepomis macrochirus)

13 DISPOSAL CONSIDERATIONS

Disposal Methods:

Dispose of waste material in accordance with all local, state, and federal requirements.

Disposal Containers:

Use properly approved container for disposal.

Special Precautions:

Do not dispose of with household garbage.
Do not flush to surface waters or drains.

14 TRANSPORT INFORMATION

UN Number: UN1992
UN Shipping Name: Flammable liquids, toxic, n.o.s. (Distillates (petroleum), hydrotreated light, 2-ethylhexyl nitrate)
Transport Hazard Class: 3
Packing Group: III

Environmental Hazards:

Not a marine pollutant

Bulk Transport Guidance:

Data not available

Special Precautions:

DOT quantity limitations of 60L on passenger aircraft or rail, and 220L on cargo aircraft.



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SDS Number: DF670
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15 REGULATORY INFORMATION

This material and all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substances Control Act.

California Proposition 65 WARNING: This product contains measurable amounts of a chemical known to the State of California to cause cancer.

16 OTHER INFORMATION

Last Revision Date: 09/26/2016

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Diesel Force Fuel Treatment

SDS Number: DF660
DF605

1 PRODUCT AND COMPANY INFORMATION

Product Name: Diesel Force Fuel Treatment
Revision Date: 09/26/2016
SDS Number: DF660
DF605
Common Name: Diesel fuel additive
CAS Number: Blend
Product Code: DF660
DF605
Synonyms: N/A

Company Identification:

Supplier:
LYDEN OIL COMPANY
30682 Tracy Road
Walbridge, OH 43465
www.lydenoil.com

For Product Information: 1-800-245-9336
For Emergencies: 1-800-424-9300 (CHEMTREC)

2 HAZARDS IDENTIFICATION



Signal Word:

DANGER



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Diesel Force Fuel Treatment

SDS Number: DF660
DF605

Hazard Classes/Categories:

Flammable liquid, Category 3.
Acute toxicity, Oral category 4.
Acute toxicity, Dermal category 4.
Acute toxicity, Inhalation category 4.
Skin irritant, Category 2.
Serious eye irritation, Category 2A.
Germ cell mutagen, Category 1B.
Carcinogen, Category 1B.
Aspiration hazard, Category 1.
Hazardous to the aquatic environment, Category chronic 3.

Hazard Statement(s):

H226: Flammable liquid and vapor.
H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H332: Harmful if inhaled.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H340: May cause genetic defects.
H350: May cause cancer.
H304: May be fatal if swallowed and enters airways.
H412: Harmful to aquatic life with long-lasting effects.

Precaution Statement(s):

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.
P201: Obtain special instructions before use.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261: Avoid breathing dust/fumes/gas/mist/vapors/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P308+311: IF exposed or concerned: Call a POISON CENTER/ doctor.
P331: Do NOT induce vomiting.
P403+235: Store in a well ventilated place. Keep cool.



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Diesel Force Fuel Treatment

SDS Number: DF660
DF605

P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazard Statement(s):

-NFPA Ratings:
Health = 1
Fire = 2
Reactivity = 0

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:

Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS Number	Percentage
Distillates (petroleum), hydrotreated light	64742-47-8	25-50
2-butoxyethanol	111-76-2	10-20
2-ethylhexyl nitrate	27247-96-7	10-25
Solvent naphtha (petroleum), light arom.	64742-95-6	2.5-10
Solvent naphtha (petroleum), heavy arom.	64742-94-5	2.5-10
1,2,4-trimethylbenzene	95-63-6	<2.5
Xylene	1330-20-7	1-2.5
Mesitylene	108-67-8	1-2.5
Benzene, ethylenated, residues, distn. Lights	178535-25-6	0.1-1
Naphthalene	91-20-3	0.25-1
Ethylbenzene	100-41-4	0.1-1
1,3,5-triethylbenzene	102-25-0	0.1-1
Cumene	98-82-8	0.1-1

**Any concentration shown as a range is to protect confidentiality or is due to batch variation.*



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Diesel Force Fuel Treatment

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DF605

4 FIRST AID MEASURES

Description of First Aid Measures:

Inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.

Skin Contact:

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation continues, consult a doctor.

Eye Contact:

Rinse cautiously with water. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists.

Ingestion:

Do not induce vomiting; immediately call for medical help.

Symptoms and Effects, both acute and delayed:

- Most important symptoms and effects, both acute and delayed:

Headache

Dizziness

Disorientation

Nausea

May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard.

Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Harmful if swallowed. May be fatal if swallowed and enters airways. Swallowing a small quantity of



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Diesel Force Fuel Treatment

SDS Number: DF660
DF605

this material will result in serious health hazard.
- Indication of any immediate medical attention and special treatment needed:
Medical supervision for at least 48 hours.

Recommended Actions:

Treat symptomatically. Call a doctor or poison control center for guidance.

5 FIRE FIGHTING MEASURES

Recommended Fire-Extinguishing Equipment:

Use dry powder, foam, or carbon dioxide fire extinguishers. Do NOT use water.

Possible Hazards During a Fire:

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Recommendations to Firefighters:

Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Do not use a water jet.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid eye contact. Avoid repeated or prolonged skin contact.
Personal protective equipment must be worn.
Avoid contact with skin, eyes or clothing. Keep unprotected persons away.



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Diesel Force Fuel Treatment

SDS Number: DF660
DF605

Emergency Procedures:

Contain spilled material, collect in suitable and properly labeled containers.

Environmental Precautions:

Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system. Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

Cleanup Procedures:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

7 HANDLING AND STORAGE

Handling Precautions:

- Precautions for safe handling:
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.
Keep respiratory protective device available.

Storage Requirements:

Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.



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Diesel Force Fuel Treatment

SDS Number: DF660
DF605

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

-111-76-2 2-butoxyethanol (10-20%):

PEL TWA: 240 mg/m³, 50 ppm

Skin

REL TWA: 24 mg/m³, 5 ppm

Skin

TLV TWA: 97 mg/m³, 20 ppm

BEI

-95-63-6 1,2,4-trimethylbenzene (2.5%):

REL TWA: 125 mg/m³, 25 ppm

TLV TWA: 123 mg/m³, 25 ppm

-1330-20-7 Xylene (1-2.5%):

PEL TWA: 435 mg/m³, 100 ppm

REL STEL: 655 mg/m³, 150 ppm

TWA: 435 mg/m³, 100 ppm

TLV STEL: 651 mg/m³, 150 ppm

TWA: 434 mg/m³, 100 ppm

BEI

-108-67-8 Mesitylene (1-2.5%):

REL TWA: 125 mg/m³, 25 ppm

TLV TWA: 123 mg/m³, 25 ppm

-91-20-3 Naphthalene (0.25-1%):

PEL TWA: 50 mg/m³, 10 ppm

REL STEL: 75 mg/m³, 15 ppm

TWA: 50 mg/m³, 10 ppm

TLV TWA: 52 mg/m³, 10 ppm

Skin; BEI

- Ingredients with biological limit values:



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-111-76-2 2-butoxyethanol (10-20%):

BEI 200 mg/g creatinine
Medium: urine
Time: end of shift
Parameter: Butoxyacetic acid with hydrolysis

-1330-20-7 Xylene (1-2.5%):

BEI 1.5 g/g creatinine
Medium: urine
Time: end of shift
Parameter: Methylhippuric acids

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Have an eye wash station near by.

Personal Protective Equipment:

- General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.
Store protective clothing separately.
Avoid contact with the eyes and skin. Wear gloves and goggles.
- Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

9	PHYSICAL AND CHEMICAL PROPERTIES
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Color:	Amber
Physical State:	Liquid
Odor:	Petroleum
Odor Threshold:	Data not available
pH:	Data not available
Melting Point:	Data not available



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Diesel Force Fuel Treatment

SDS Number: DF660
DF605

Boiling Point:	162° C
Boiling Range:	Data not available
Flash Point:	61° C
Evaporation Rate:	Data not available
Flammability:	Data not available
Flammability Limits:	Data not available
Vapor Pressure:	2 hPa at 20° C
Vapor Density:	Data not available
Relative Density:	Data not available
Solubilities:	Not miscible or difficult to mix
Partition Coefficient:	Data not available
Auto-Ignition Temperature:	Data not available
Decomposition Temperature:	Data not available
Viscosity:	Data not available

10 STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Reactivity:

Not reactive under normal conditions.

Conditions to Avoid:

Extreme temperature, sparks, open flame, and direct sunlight.

Hazardous Reactions:

No known hazardous reactions.

Incompatible Materials:

No further relevant information available.

Decomposition Products:

Oxides of carbon.



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Diesel Force Fuel Treatment

SDS Number: DF660
DF605

11 TOXICOLOGICAL INFORMATION

Routes of Exposure:

Inhalation, skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Exposure Effects:

- On the skin: Irritant to skin and mucous membranes.
- On the eye: Irritating effect.

Measures of Toxicity:

ATE (Acute Toxicity Estimates):

Oral LD50: 1797 mg/kg
Dermal LD50: 1924 mg/kg
Inhalative LC50/4 h: 11.3 mg/l

1 11-76-2 2-butoxyethanol:

Oral LD50: 470 mg/kg (rat)
Dermal LD50: 400 mg/kg (rabbit)
Inhalative LC50/4 h: 2.2 mg/l (rat)

27247-96-7 2-ethylhexyl nitrate:

Oral LD50: 500 mg/kg (ATE)
Dermal LD50: 1100 mg/kg (ATE)
Inhalative LC50/4 h: 11 mg/l (ATE)

64742-95-6 Solvent naphtha (petroleum), light arom.:

Oral LD50: >6800 mg/kg (rat)
Dermal LD50: >3400 mg/kg (rabbit)
Inhalative LC50/4 h: >10.2 mg/l (rat)



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95-63-6 1,2,4-trimethylbenzene:

Oral LD50: 5000 mg/kg (rat)
Inhalative LC50/4 h: 18 mg/l (rat)

1330-20-7 xylene:

Oral LD50: 4300 mg/kg (rat)
Dermal LD50: 2000 mg/kg (rabbit)
Inhalative LC50/4 h: 6700 mg/l (rat)

178535-25-6 Benzene, ethylenated, residues, distn.

Lights:

Oral LD50: >2000 mg/kg (rat)

91-20-3 naphthalene:

Oral LD50: 490 mg/kg (rat)
Dermal LD50: 5000 mg/kg (rat)

100-41-4 ethylbenzene:

Oral LD50: 3500 mg/kg (rat)
Dermal LD50: 17800 mg/kg (rabbit)
Inhalative LC50/4 h: 17.8 mg/l (rat)

98-82-8 cumene:

Oral LD50: 1400 mg/kg (rat)
Dermal LD50: 12300 mg/kg (rabbit)
Inhalative LC50/4 h: 24.7 mg/l (mouse)

Carcinogenic/Mutagenic Precautions:

2-butoxyethanol: Carcinogenic category 3 (IARC).
Xylene: Carcinogenic category 3 (IARC).
Naphthalene: Carcinogenic category 2B (IARC).
Ethylbenzene: Carcinogenic category 2B (IARC).
Cumene: Carcinogenic category 2B (IARC).



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Diesel Force Fuel Treatment

SDS Number: DF660
DF605

12 ECOLOGICAL INFORMATION

Ecological Precautions:

Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms.

Ecological Effects:

111-76-2 2-butoxyethanol:

EC50 (48 h): >1000 mg/L (daphnia)

LC50 (96 h) (static): 1490 mg/l (Lepomis macrochirus)

13 DISPOSAL CONSIDERATIONS

Disposal Methods:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal Containers:

Use properly approved container for disposal.

Special Precautions:

Do not flush to surface waters or drains.

14 TRANSPORT INFORMATION

UN Number:

UN1993

UN Shipping Name:

Flammable liquids, n.o.s. (Distillates (petroleum), hydrotreated light, Solvent naphtha (petroleum), light arom., Xylenes, 2-butoxyethanol)

Transport Hazard Class:

3

Packing Group:

III



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Diesel Force Fuel Treatment

SDS Number: DF660
DF605

Environmental Hazards:

None

Bulk Transport Guidance:

Data not available

Special Precautions:

DOT quantity limitations of 60 L on passenger aircraft or rail, and 220 L on cargo aircraft.

15 REGULATORY INFORMATION

This material and all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substances Control Act.

California Proposition 65 WARNING: This product contains measurable amounts of a chemical known to the State of California to cause cancer.

16 OTHER INFORMATION

Last Revision Date: 09/26/2016

The information contained in this Safety Data Sheet (SDS) relates only to the specific material designated. The supplier assumes no legal responsibility of the use or reliance upon this data. This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of the supplier.



Safety Data Sheet

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Diesel Force Oil System Cleaner Concentrate

SDS Number: DF430
DF420

1 PRODUCT AND COMPANY INFORMATION

Product Name: Diesel Force Oil System Cleaner Concentrate
Revision Date: 09/26/2016
SDS Number: DF430
DF420
Common Name: N/A
CAS Number: Blend
Product Code: DF430
DF420
Synonyms: N/A

Company Identification:

Supplier:
LYDEN OIL COMPANY
30682 Tracy Road
Walbridge, OH 43465
www.lydenoil.com

For Product Information: 1-800-245-9336
For Emergencies: 1-800-424-9300 (CHEMTREC)

2 HAZARDS IDENTIFICATION



Signal Word:

WARNING



Safety Data Sheet

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Diesel Force Oil System Cleaner Concentrate

SDS Number: DF430
DF420

Hazard Classes/Categories:

Skin sensitization, Category 1.

Hazard Statement(s):

H317: May cause an allergic skin reaction.

Precaution Statement(s):

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.
P261: Avoid breathing fumes/gas/mist/vapors/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection.
P302+352: IF ON SKIN: Wash with plenty of water.
P333+313: If skin irritation or a rash occurs: Get medical advice/attention.
P362+364: Take off contaminated clothing and wash it before reuse.
P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazard Statement(s):

-NFPA Ratings:
Health = 0
Fire = 1
Reactivity = 0

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:

Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS Number	Percentage
Hydrotreated heavy paraffinic petroleum	64742-54-7	>99
Diethylenetriamine	111-40-0	<1

**Any concentration shown as a range is to protect confidentiality or is due to batch variation.*



Safety Data Sheet

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Diesel Force Oil System Cleaner Concentrate

SDS Number: DF430
DF420

4 FIRST AID MEASURES

Description of First Aid Measures:

Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin Contact:

Wash with soap and water.
Remove contaminated clothing and wash before reuse.
Get medical attention if needed.

Eye Contact:

Flush with water for several minutes.
If effects occur, consult a physician.

Ingestion:

Rinse mouth with water.
If symptoms develop, obtain medical attention.

Symptoms and Effects, both acute and delayed:

No further relevant data available.

Recommended Actions:

Treat symptomatically. Call a doctor or poison control center for guidance.

5 FIRE FIGHTING MEASURES

Recommended Fire-Extinguishing Equipment:

Use dry powder, foam, or carbon dioxide fire extinguishers. Water may be ineffective in fighting an oil fire unless used by experienced fire fighters.



Safety Data Sheet

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Diesel Force Oil System Cleaner Concentrate

SDS Number: DF430
DF420

Possible Hazards During a Fire:

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Recommendations to Firefighters:

Proper protective equipment including breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid eye contact. Avoid repeated or prolonged skin contact.
Personal protective equipment must be worn.
Avoid contact with skin, eyes or clothing.

Emergency Procedures:

Contain spilled material, collect in suitable and properly labeled containers.

Environmental Precautions:

Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.

Cleanup Procedures:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 HANDLING AND STORAGE

Handling Precautions:

Wear personal protective equipment. Avoid contact with eyes.



Safety Data Sheet

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Diesel Force Oil System Cleaner Concentrate

SDS Number: DF430
DF420

Storage Requirements:

Keep containers tightly closed in a dry, cool and well-ventilated place.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

-64742-54-7 Distillates (petroleum), hydrotreated heavy parffinic:

ACGIH TWA – 5mg/m³ (oil mist)
ACGIH STEL - 10mg/m³ (oil mist)
OSHA TWA – 5mg/m³ (oil mist)

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94).

Personal Protective Equipment:

Wash hands before breaks and at the end of work.
Use safety glasses and gloves.

9 PHYSICAL AND CHEMICAL PROPERTIES

Color:	Amber
Physical State:	Liquid
Odor:	Data not available
Odor Threshold:	Data not available
pH:	Data not available
Melting Point:	Data not available
Boiling Point:	Data not available
Boiling Range:	Data not available
Flash Point:	Data not available
Evaporation Rate:	Data not available
Flammability:	Data not available
Flammability Limits:	Data not available
Vapor Pressure:	Data not available
Vapor Density:	Data not available
Relative Density:	6.89 pounds per gallon at 60° F
Solubilities:	Insoluble in water
Partition Coefficient:	Data not available



Safety Data Sheet

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Diesel Force Oil System Cleaner Concentrate

SDS Number: DF430
DF420

Auto-Ignition Temperature: Data not available
Decomposition Temperature: Data not available
Viscosity: Data not available

10 STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Reactivity:

Not reactive under normal conditions.

Conditions to Avoid:

Extreme temperature, sparks, open flame, and direct sunlight.

Hazardous Reactions:

No known hazardous reactions.

Incompatible Materials:

No further relevant information available.

Decomposition Products:

Hazardous decomposition products are not expected to form.

11 TOXICOLOGICAL INFORMATION

Routes of Exposure:

Inhalation, skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Exposure Effects:

Repeated skin contact may cause dermatitis or an oil acne.



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Diesel Force Oil System Cleaner Concentrate

SDS Number: DF430
DF420

Measures of Toxicity:

No test data available.

Carcinogenic/Mutagenic Precautions:

Non-carcinogenic and not expected to be mutagenic.

12 ECOLOGICAL INFORMATION

Ecological Precautions:

Do not allow product to reach ground water, water course or sewage system.

Ecological Effects:

No specific environmental or aquatic data available.

13 DISPOSAL CONSIDERATIONS

Disposal Methods:

Dispose of waste material in accordance with all local, state, and federal requirements.

Disposal Containers:

Use properly approved container for disposal.

Special Precautions:

Do not flush to surface waters or drains.

14 TRANSPORT INFORMATION

<u>UN Number:</u>	Data not available
<u>UN Shipping Name:</u>	Data not available
<u>Transport Hazard Class:</u>	Data not available
<u>Packing Group:</u>	Data not available



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Diesel Force Oil System Cleaner Concentrate

SDS Number: DF430
DF420

Environmental Hazards:

Data not available

Bulk Transport Guidance:

Data not available

Special Precautions:

Not regulated by DOT.

15 REGULATORY INFORMATION

This material and all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substances Control Act.

16 OTHER INFORMATION

Last Revision Date: 09/26/2016

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