

# SAFETY DATA SHEET (SDS)

## ( DIESEL ENGINE INTAKE / EGR CLEANER WATER BASE )

### Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name : (FL 130)

Synonyms :

Recommended use : Cleaner/Degreaser, Oil field Degreaser/Rig Wash

Restrictions on use : Commercial / Industrial Cleaning

Product dilution information : 1:10 – 1:200 Degreasing/Cleaning, 1:80 Rig Wash

Company : Precision Chemical Manufacturing Ltd  
16671 113 Avenue  
Edmonton, Alberta Canada T5M 2X2  
(780) 484-5641

Emergency telephone number : US/Canada CANUTEC (613) 996-6666

Issuing date : March 9, 2015

### Section 2: HAZARD IDENTIFICATION

#### Product AS SOLD

Physical and Chemical hazards : Not Flammable or Combustible

GHS Classification : Skin Corrosive : Category 1  
Serious Eye Damage : Category 1  
Corrosive to Metals : Category 1  
Acute Toxicity : Category 5

Hazard Pictograms :



Danger

Hazard Statements : H290 Corrosive to metals H303 May be harmful if swallowed  
H314 Causes severe skin burns and eye damage. H313 May be harmful in contact with skin  
H402 Harmful to aquatic life H333 May be harmful if inhaled

Precautionary Statements : P280 Wear protective gloves/clothing.  
P305 + P351 + P338 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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## Potential Health Effects

- Eyes : Causes eye burns. Direct contact with the eyes can cause irreversible damage, including blindness.
- Skin : Causes skin irritation. Prolonged contact can cause redness, blistering, itching, scaling, and severe burns to skin.
- Ingestion : Moderately toxic, causes digestive tract burns.
- Inhalation : Avoid breathing vapours, spray or mist. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.
- Chronic Exposure : Contains material which may cause damage to the following organs: blood, kidneys, the nervous system, liver, heart, spleen, lymphatic system, gastrointestinal tract, upper respirator tract, skin, bone marrow, central nervous system (CNS), eye, lens, cornea, testes. Prolonged contact with eye tissue may cause severe and permanent eye injury (blindness). Prolonged exposure may result in skin burns and ulcerations. Repeated or prolonged exposure to spray or mist may product respiratory tract irritation, leading to frequent attacks of bronchial infection.

## Product AT USE DILUTION

- Physical and chemical hazards : Not flammable or combustible
- Eyes : Causes eye burns. Direct contact with the eyes can cause irreversible damage, including blindness.
- Skin : Causes skin irritation. Prolonged contact can cause redness, blistering, itching, scaling, and severe burns to skin.
- Ingestion : Moderately toxic, causes digestive tract burns.
- Inhalation : Avoid breathing vapours, spray or mist .May cause slight nose, throat and lung irritation.
- Chronic Exposure : Heath injuries are not known or expected under normal use.

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### Product AS SOLD

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration (%)
Sodium Hydroxide	1310-73-2	15-30
2-butoxyethanol	111-76-2	1-5
Cocamidopropyl betaine	61789-40-0	1-5

Product AT USE DILUTION	CAS-No.	Concentration (%)
Sodium Hydroxide	1310-73-2	1-5 @ 1:10

## Section 4: FIRST AID MEASURES

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## Product AS SOLD

- In case of eye contact : Flush with Water for at least 15 minutes. Call a physician immediately
- In case of skin contact : Flush with cold water for at least 15 minutes. If irritation persists, call a physician.
- Ingestion : Do not induce vomiting. Drink 3-4 glasses of milk or water. Call a physician immediately
- Inhalation : Remove to fresh air
- Protection for first-aid respondents : If potential for exposure exists refer to section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.

## Product AT USE DILUTION

- In case of eye contact : Flush with Water for at least 15 minutes. Call a physician immediately
- In case of skin contact : Flush with cold water for at least 15 minutes. If irritation persists, call a physician.
- Ingestion : Do not induce vomiting. Drink 3-4 glasses of milk or water. Call a physician immediately
- Inhalation : Remove to fresh air
- Protection for first-aid respondents : If potential for exposure exists refer to section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.

See toxicological information (Section 11)

<b>Section 5:</b>	<b>FIREFIGHTING MEASURES</b>
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## Product AS SOLD

- Suitable extinguishing media : CO<sub>2</sub>, dry Foam, and water spray.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not Flammable or combustible
- Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
Nitrogen oxides (NOx)  
Sulphur oxides
- Special protective equipment for firefighters : Wear adequate respiratory protection and clothing protection.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.
- Risk of explosion : None.

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<b>Section 6:</b>	<b>ACCIDENTAL RELEASE MEASURES</b>
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**Product AS SOLD**

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill or leak. Avoid inhalation, ingestion, and contact with eyes or skin. Wear a chemical resistant apron and boots in case of spill. Stop leak if without risk. Move containers from spill area. Use sorbent boom socks to contain large spills and keep out of sumps and drains.
- Environmental precautions : None.
- Methods and materials for containment and cleaning up : Dilute with water and mop up if water soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Dispose of via a licensed waste disposal contractor according to local/national regulations.

**Product AT USE DILUTION**

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill or leak. Avoid inhalation, ingestion, and contact with eyes or skin. Wear a chemical resistant apron and boots in case of spill. Stop leak if without risk. Move containers from spill area. Use sorbent boom socks to contain large spills and keep out of sumps and drains.
- Environmental precautions : None.
- Methods and materials for containment and cleaning up : Dilute with water and mop up if water soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor according to local/national regulations.

<b>Section 7:</b>	<b>HANDLING AND STORAGE</b>
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**Product AS SOLD**

- Advise on safe handling : Do not ingest. Do not get in eyes, on skin, or clothing. Do not breathe dust/fumes/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not reuse container.
- Conditions for safe storage : Store in suitable labeled containers. Keep out of reach of children. Store containers in a cool dry, and well ventilated area. Do not store near food or drink.
- Storage temperature : 1°C - 40°C

**Product AT USE DILUTION**

- Advise on safe handling : Do not ingest. Do not get in eyes, on skin, or clothing. Do not breathe dust/fumes/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not reuse container.
- Conditions for safe storage : Store in suitable labeled containers. Keep out of reach of children. Store containers in a cool dry, and well ventilated area. Do not store near food or drink.

<b>Section 8:</b>	<b>EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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**Product AS SOLD**

**Components with workplace control parameters**

Components	CAS #	Form of Exposure	Permissible Concentration	Basis

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2-butoxyethanol	111-76-2	TWA	50 ppm/ 8 hours	OSHA PEL (United States 11/2006)
		TWA	240 mg/m <sup>3</sup> 8 hours	OSHA PEL (United States 11/2006)
		TWA	20 ppm/ 8 hours	ACGIH TLV (United States 1/2009)
		TWA	5 ppm/ 10 hours	NIOSH REL (United States 6/2009)
		TWA	24 mg/m <sup>3</sup> 10 Hours	NIOSH REL (United States 6/2009)
Sodium Hydroxide	1310-73-2	C	2 mg/m <sup>3</sup>	British Columbia OEL (Canada)
		C	2 mg/m <sup>3</sup>	Ontario OELs (Canada)
		(c)	2 mg/m <sup>3</sup>	Alberta OEL (Canada)
		Ceiling	2 mg/m <sup>3</sup>	ACGIH (United States)
		Ceiling	2 mg/m <sup>3</sup>	NIOSH REL (United States)
		TWA	2 mg/m <sup>3</sup>	OSHA Z1 (United States)

## Product AS SOLD

### Personal protective equipment

- Eye protection : Safety goggles, and face shield
- Hand protection : Wear the following personal protective equipment:  
Standard glove type (rubber, latex, nitrile, vinyl)  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.  
Gloves should be inspected prior to use.
- Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles, and protective clothing.
- Respiratory protection : When workers are spraying, foaming, or misting product they should use a certified respirator that is capable of filtering organic chemical compounds.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practices. Remove and wash contaminated clothing before re-use. Wash face, hands, and any exposed skin with a mild soap after handling. Provide suitable facilities for flushing or rinsing eyes and body in the event of contact or splash.

## Product AT DILUTION

### Personal protective equipment

- Eye protection : Safety goggles, and face shield
- Hand protection : Wear the following personal protective equipment:  
Standard glove type (rubber, latex, nitrile, vinyl)  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.  
Gloves should be inspected prior to use.
- Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles, and protective clothing.
- Respiratory protection : When workers are spraying, foaming, or misting product they should use a certified respirator that is capable of filtering organic chemical compounds.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practices. Remove and wash contaminated clothing before re-use. Wash face, hands, and any exposed skin

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with a mild soap after handling. Provide suitable facilities for flushing or rinsing eyes and body in the event of contact or splash.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### Product AS SOLD

Appearance : Liquid  
Color : Clear Amber  
Odor : Slight  
pH : 14  
Flash point : Not Applicable  
Odor Threshold : No data available  
Melting point/freeze point :  
Initial boiling point and boiling range : 96°C (204.8°F)  
Evaporation rate : No data available  
Flammability (solid, gas) : No data available  
Upper exposure limits : No data available  
Lower exposure limits : No data available  
Vapour pressure : No data available  
Relative vapour density : No data available  
Relative density : 1.079  
Water solubility : 100%  
Solubility in other solvents : No data available  
Partition coefficient: n-octanol/water : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Viscosity, kinematic : No data available  
Oxidizing properties : No data available  
Molecular weight : No data available  
VOC : No data available

### Product AT USE DILUTION

Liquid  
Clear Amber  
Slight  
10.5-13

## Section 10: STABILITY AND REACTIVITY

### Product AS SOLD

Chemical stability : Stable under normal conditions.  
Possibility of hazardous reactions : None known.  
Conditions to avoid : None known.  
Incompatible material : Strong acids, may react violently with acids.  
Hazardous decomposition products : Carbon oxides (CO, CO<sub>2</sub>)

## Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, eye contact, skin contact

### Potential Health Effects

#### Product AS SOLD

Eyes : May cause serious eye damage  
Skin : Causes moderate irritation, burning and redness.

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Ingestion : Can cause digestive tract burns.  
Inhalation : May cause irritation to the nose, throat and lungs.  
Chronic exposure : Health injuries are not known or expected under normal use.

## Product AT USE DILUTION

Eyes : Moderate irritant, cause minor burning, redness, and possible blindness.  
Skin : Causes slight irritation, minor burning and redness.  
Ingestion : Can cause digestive tract burns.  
Inhalation : May cause slight irritation to the nose, throat and lungs.  
Chronic exposure : Health injuries are not known or expected under normal use.

## Experience with human exposure

### Product AS SOLD

Eyes Contact : Redness, Pain, and Corrosion  
Skin : Redness, and moderate irritation/burning.  
Ingestion : Corrosion, digestive tract burns and abdominal pain.  
Inhalation : Cough, mild respiratory irritation.

## Product AT USE DILUTION

Eyes Contact : Redness, Pain, and Corrosion  
Skin : Redness, and slight irritation/burning.  
Ingestion : Corrosion, digestive tract burns and abdominal pain.  
Inhalation : Cough, mild respiratory irritation.

## Toxicity

### Product AS SOLD

Acute oral toxicity : No data available  
Acute inhalation toxicity : No data available  
Acute dermal toxicity : No data available  
Skin corrosion/irritation : No data available  
Serious eye damage/eye irritation : No data available  
Respiratory or skin sensitization : No data available  
Carcinogenicity : No data available

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Reproductive effects : No data available  
Germ cell mutagenicity : No data available  
Teratogenicity : No data available  
STOT – single exposure : No data available  
STOT – repeated exposure : No data available  
Aspiration toxicity : No data available

## Components

2-Butoxyethanol LD<sub>50</sub>ORAL(RAT) 470 mg/Kg  
LD<sub>50</sub>DERMAL(RABBIT) 220mg/Kg  
LC<sub>50</sub>INHALATION(RAT) 450ppm/4 hrs  
Cocamidopropyl betaine LD<sub>50</sub>ORAL(RAT) 2335 mg/Kg  
LD<sub>50</sub>DERMAL(RABBIT) >2000 mg/Kg

## Section 12: ECOLOGICAL INFORMATION

### Product AS SOLD

#### Ecotoxicity

Environmental Effects : No data available

#### Product

Toxicity to fish : No data available

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

#### Components

Toxicity to fish : 2-Butoxyethanol  
96 h LC50 Other fish : >220 mg/L  
Cocamidopropyl betaine  
96 h LC50 Fish 0.7 – 7 mg/L

#### Components

Toxicity to daphnia and other aquatic invertebrates : 2-Butoxyethanol  
24 h EC50 Daphnia magna : 1,815 mg/L

Cocamidopropyl betaine  
48 h EC50 Crustacea 1.9 mg/L

Sodium Hydroxide  
48 h EC50 Daphnia 40 mg/L

#### Components

Toxicity to algae : No data available

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**Persistence and degradability**

**PRODUCT AS SOLD** : No data available

**Product AT USE DILUTION** : No data available

**Bioaccumulative potential** : No data available

**Mobility in soil** : No data available

**Other adverse effects** : No data available

## Section 13: DISPOSAL CONSIDERATIONS

**Product AS SOLD**

Disposal methods : This product should not be allowed to enter into drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of product in accordance to local/national regulations. Dispose of wastes in an approved disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycle or disposal. Do not re-use empty containers.

**Product AT USE DILUTION**

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of product in accordance to local/national regulations. Dispose of wastes in an approved disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycle or disposal. Do not re-use empty containers.

## Section 14: TRANSPORTATION INFORMATION

**Product AS SOLD**

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Regulatory information	UN Number	Proper shipping name	Class	Packing Group	Label
<b>TDG Classification</b>	1760	CORROSIVE LIQUID, NOS (sodium hydroxide)	8	II	
<b>DOT Classification</b>	1760	CORROSIVE LIQUID, NOS (sodium hydroxide)	8	II	
<b>IMDG Class</b>	1760	CORROSIVE LIQUID, NOS (sodium hydroxide)	8	II	

**Note: DOT classification applies to most packaging sizes. For specific container size classification or for size exemptions, refer to the Bill of Lading with your shipment.**

**Product AT USE DILUTION**

Not intended for transport.

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<b>Section 15:</b>	<b>REGULATORY INFORMATION</b>
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**Product AS SOLD**

**WHMIS Classification** : E Corrosive Material

**Product AT USE DILUTION**

**WHMIS Classification** : E Corrosive Material

This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

The components of this product are reported in the following inventories:

**United States TSCA Inventory :**  
On TSCA Inventory

**Canadian Domestic Substances List (DSL) :**  
All components of this product are on the Canadian DSL.

**Australia Industrial Chemical (Notification and Assessment) Act :**  
On the inventory, or in compliance with the inventory.

**New Zealand Inventory of Chemicals (NZIoC), as published by ERMA New Zealand :**  
On the inventory, or in compliance with the inventory.

**Japan. ENCS - Existing and New Chemical Substances Inventory :**  
On the inventory, or in compliance with the inventory.

**Japan ISHL – Inventory of Chemical Substances (METI) :**  
On the inventory, or in compliance with the inventory.

**Korea Korean Existing Chemicals Inventory (KECI) :**  
On the inventory, or in compliance with the inventory.

**Philippines Inventory of Chemicals and Chemical Substances (PICCS) :**  
On the inventory, or in compliance with the inventory.

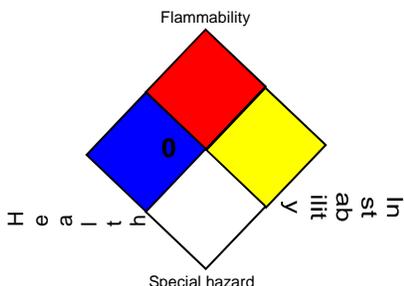
**China Inventory of Existing Chemical Substances :**  
On the inventory, or in compliance with the inventory.

<b>Section 16:</b>	<b>OTHER INFORMATION</b>
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**Product AS SOLD**

**NFPA**

**HMIS III :**



<b>HEALTH</b>	3
<b>FLAMMABILITY</b>	0
<b>REACTIVITY</b>	1

0 = NOT SIGNIFICANT, 1 = SLIGHT, 2 = MODERATE, 3 = HIGH

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4 = EXTREME, \* = CHRONIC

<p><b>Product AT USE DILUTION</b></p> <p><b>NFPA</b></p> <p style="text-align: center;">Special hazard</p>	<p><b>HMIS III :</b></p> <table border="1"> <tr> <td style="background-color: blue; color: white; text-align: center;"><b>HEALTH</b></td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: red; color: white; text-align: center;"><b>FLAMMABILITY</b></td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: yellow; text-align: center;"><b>REACTIVITY</b></td> <td style="text-align: center;">0</td> </tr> </table> <p>0 = NOT SIGNIFICANT, 1 = SLIGHT, 2 = MODERATE, 3 = HIGH 4 = EXTREME, * = CHRONIC</p>	<b>HEALTH</b>	2	<b>FLAMMABILITY</b>	0	<b>REACTIVITY</b>	0
<b>HEALTH</b>	2						
<b>FLAMMABILITY</b>	0						
<b>REACTIVITY</b>	0						

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 Prepared by : Precision Chemical Manufacturing Ltd. (780) 484-5641

**Further information**

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