

SAFETY DATA SHEET (SDS)

(DIESEL ENGINE INTAKE / EGR WATER BASE RINSE)

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name : (FL 132)

Synonyms :

Recommended use : Anti- Corrosion Inhibitor

Restrictions on use :

Product dilution information : 1:10 – 1:50

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 22, 2016

Section 2: HAZARD IDENTIFICATION

Product AS SOLD

Physical and Chemical hazards : Not Flammable or Combustible

GHS Classification : Eye irritation : Category 2B

Harzard Pictograms : May be harmful if swallowed : Category 5

Warning

Hazard Statements : H320 Causes eye irritation
H303 May be harmful if swallowed

Precautionary Statements : P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses. If present and easy to do. Continue rinsing.

Potential Health Effects : P312 Call a POISON CENTRE or doctor/physician if you feel unwell.

Eyes : May cause eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

Skin : No known acute effects of this product resulting from skin contact.

SAFETY DATA SHEET

Ingestion : May cause upset stomach or nausea. If effects persist consult a physician or call POISON CENTRE,
Inhalation : Not likely under normal conditions.
Chronic Exposure : Prolonged or repeated contact may dry skin and cause irritation.

Product AT USE DILUTION

Physical and chemical hazards : Not flammable or combustible
Eyes : May cause eye irritation. Inflammation of the eye is characterized by redness, watering and itching.
Skin : No known acute effects of this product resulting from skin contact.
Ingestion : May cause upset stomach or nausea. If effects persist consult a physician or call POISON CENTRE,
Inhalation : Not likely under normal conditions.
Chronic Exposure : Prolonged or repeated contact may dry skin and cause irritation.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration (%)
Tetrasodium ethylenediamine tetraacetate	64-02-8	≥5 - <10
Sodium (C14 – 16)Olefin Sulfonate	68439-57-6	<1

Product AT USE DILUTION	CAS-No.	Concentration (%)
Tetrasodium ethylenediamine tetraacetate	64-02-8	<1

Section 4: FIRST AID MEASURES

Product AS SOLD

In case of eye contact : Flush with Water for at least 15 minutes. Call a physician if irritation persists.
In case of skin contact : Not applicable. If irritation occurs wear suitable protective gloves.
Ingestion : Do not induce vomiting. Never give anything to an unconscious person. Drink 3-4 glasses of milk or water. Call a physician or POISON CONTROL 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.

SAFETY DATA SHEET

Product AT USE DILUTION

In case of eye contact	:	Flush with Water for at least 15 minutes. Call a physician if irritation persists.
In case of skin contact	:	Not applicable. If irritation occurs wear suitable protective gloves.
Ingestion	:	Do not induce vomiting. Never give anything to an unconscious person. Drink 3-4 glasses of milk or water. Call a physician or POISON CONTROL 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)

Section 5: FIREFIGHTING MEASURES

Product AS SOLD

Suitable extinguishing media	:	CO ₂ , 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 (NO _x) 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.

Section 6: ACCIDENTAL RELEASE MEASURES

Product AS SOLD

Personal precautions, protective equipment and emergency procedures	:	Refer to protective measures listed in sections 7 and 8.
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.

Product AT USE DILUTION

SAFETY DATA SHEET

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
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.

Section 7: HANDLING AND STORAGE

Product AS SOLD

Advise on safe handling : Do not ingest. Avoid contact with eyes. Wash thoroughly after handling.
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.
Storage temperature : 5°C - 40°C (41°F - 104°F)

Product AT USE DILUTION

Advise on safe handling : Do not ingest. Avoid contact with eyes. Wash thoroughly after handling.
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.
Storage temperature : 5°C - 40°C (41°F - 104°F)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Personal protective equipment

Eye protection : Recommended: Safety glasses
Hand protection : For prolonged or repeated handling, use gloves. Nitrile or rubber gloves
Skin protection : No protective equipment is needed under normal use conditions
Respiratory protection : No special measures required.
Hygiene measures : Handle in accordance with good industrial hygiene and safety practices. Provide suitable facilities for flushing or rinsing eyes in the event of contact or splash.

Product AT USE DILUTION

Personal protective equipment

Eye protection : Recommended: Safety glasses
Hand protection : For prolonged or repeated handling, use gloves. Nitrile or rubber gloves
Skin protection : No protective equipment is needed under normal use conditions
Respiratory protection : No special measures required.

SAFETY DATA SHEET

Hygiene measures : Handle in accordance with good industrial hygiene and safety practices. Provide suitable facilities for flushing or rinsing eyes in the event of contact or splash.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Product AS SOLD

Appearance : Liquid
Color : Clear Blue
Odor : Mild
pH : 10.5-11
Flash point : Not Applicable
Odor Threshold : No data available
Melting point/freeze point :
Initial boiling point and boiling range : 100°C (212°F)
Evaporation rate : < 1 (Butyl Acetate = 1)
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 : 1.021
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 Blue
Mild
8-9

Section 10: STABILITY AND REACTIVITY

Product AS SOLD

Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : None.
Conditions to avoid : None.
Incompatible material : None.
Hazardous decomposition products : Carbon oxides (CO, CO₂)

Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Eye contact, and skin contact.

Potential Health Effects

Product AS SOLD

Eyes : May cause eye irritation.
Skin : Prolonged or repeated contact may cause dryness or mild irritation.

SAFETY DATA SHEET

Ingestion : May cause gastrointestinal irritation, consult a physician or POISON CONTROL immediately.

Inhalation : Inhalation not likely under normal conditions.

Chronic exposure : Prolonged or repeated contact may dry skin and cause irritation.

Product AT USE DILUTION

Eyes : May cause eye irritation.

Skin : Prolonged or repeated contact may cause dryness or mild irritation.

Ingestion : May cause gastrointestinal irritation, consult a physician or POISON CONTROL immediately.

Inhalation : Inhalation not likely under normal conditions.

Chronic exposure : Prolonged or repeated contact may dry skin and cause irritation.

Experience with human exposure

Product AS SOLD

Eyes Contact : Redness, Pain, and watering of the eyes

Skin : Mild irritation may occur after prolonged or repeated contact.

Ingestion : None recorded.

Inhalation : None recorded.

Product AT USE DILUTION

Eyes Contact : Redness, Pain, and watering of the eyes

Skin : Mild irritation may occur after prolonged or repeated contact.

Ingestion : None recorded.

Inhalation : None recorded.

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

SAFETY DATA SHEET

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

Sodium (C14-16) olefin sulfonate LD₅₀ORAL(RAT) 1300 - 2400 mg/Kg
LD₅₀DERMAL(RABBIT) >2000mg/Kg
Tetrasodium ethylenediamine tetraacetate LD₅₀ORAL(RAT) 3030 mg/Kg
LD₅₀DERMAL(RABBIT) >5000mg/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 : Tetrasodium ethylenediamine tetraacetate
96 h LC50 Pimephales promelas (fathead minnow): >100 mg/L
Sodium (C14-16) olefin sulfonate
96 h LC50 Fish: 2.5 - 5 mg/L

Components

Toxicity to daphnia and other aquatic invertebrates : Sodium (C14-16) olefin sulfonate
48 h EC50 Daphnia magna : 4.48 mg/L

Components

Toxicity to algae : Sodium (C14-16) olefin sulfonate
48 h EC50 Algae: 4.48 mg/L

Persistence and degradability

PRODUCT AS SOLD : Readily biodegradable.

PRODUCT AT USE DILUTION : Readily biodegradable.

SAFETY DATA SHEET

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 : 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
------------------------	-----------	----------------------	-------	---------------	-------

TDG Classification		NON REGULATED			
---------------------------	--	---------------	--	--	--

DOT Classification		NON REGULATED			
---------------------------	--	---------------	--	--	--

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.

Section 15: REGULATORY INFORMATION

Product AS SOLD

WHMIS Classification : None

Product AT USE DILUTION

SAFETY DATA SHEET

WHMIS Classification : None

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.

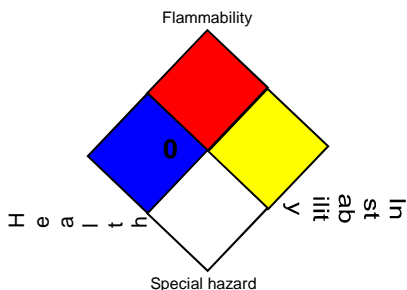
Philippines Inventory of Chemicals and Chemical Substances (PICCS) :
On the inventory, or in compliance with the inventory.

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

Section 16:	OTHER INFORMATION
--------------------	--------------------------

Product AS SOLD
NFPA

HMIS III :



HEALTH	1
FLAMMABILITY	0
REACTIVITY	0

0 = NOT SIGNIFICANT, 1 = SLIGHT,
2 = MODERATE, 3 = HIGH
4 = EXTREME, * = CHRONIC

SAFETY DATA SHEET

Product AT USE DILUTION **HMIS III :**

NFPA

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0

0 = NOT SIGNIFICANT, 1 = SLIGHT,
2 = MODERATE, 3 = HIGH
4 = EXTREME, * = CHRONIC

Issuing date : March 22, 2016
 Version : 1.0
 Prepared by : KENVO Technologies

Further information

Copyright 2015 Precision Chemical Manufacturing Ltd. License granted to make unlimited paper copies for internal use only. The above information contained herein is believed to be accurate. However, neither the above named supplier nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.