SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: BERKEBILE Oil 2+2 – Isopropyl Gas Line Anti-freeze

Manufacturers Code: B-IPA

Manufacturers Name: The Berkebile Oil Company Inc.

Address: PO BOX 715

Somerset, PA 15501

Information Phone: (814) 443-1656

Emergency Phone (CHEMTREC): 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flam. Liquid: 2 H225-Highly flammable liquid and vapor
Eye Irritation: 2A H319-Causes serious eye irritation
STOT SE: 3 H335-May cause respiratory irritation

Full test of H-Phrases: See section 16

GHS Label element



Hazard pictograms:

Signal word: Danger

Hazard statements:

H225 Highly flammable liquid and vapor H319 Causes serious eye irritation. H335 May Cause respiratory irritation H336 May cause drowsiness or dizziness.

Precautionary statements:

P210 - Keep away from heat, hot surfaces, open flames, sparks. No smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical, lighting, ventilating equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P261 - Avoid breathing mist, vapors, spray

P264 - Wash exposed skin thoroughly after handling

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- P271 Use only outdoors or in a well-ventilated area
- P280 Wear eye protection, face protection, protective clothing, protective gloves
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P312 Call a POISON CENTER or doctor/physician if you feel unwell
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P370+P378 In case of fire: Use dry chemical powder, alcoholresistant foam, carbon dioxide (CO2) to extinguish
- P403+P233 Store in a well-ventilated place. Keep container tightly closed
- P405 Store locked up
- P501 Dispose of contents/container to comply with local, state and federal regulations
- P235 Keep cool

If inhaled: Remove person to fresh air and keep comfortable for breathing

Potential Health Effects

Carcinogenicity:

IARC No component of this product present at levels greater

than or equal to 0.1% is identified as probable, possible

or confirmed human carcinogen by IARC.

ACGIH No component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by ACGIH.

OSHANo component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by OSHA.

NTP No component of this product present at levels greater

than or equal to 0.1% is identified as a known or antic-

ipated carcinogen by NTP.

Emergency Overview

WARNING!	
Appearance	liquid
Colour	colourless, clear
Odour	alcohol-like

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical Name	Concentration (%)		on (%)
67-63-0	Isopropyl alcohol	90	-	100
64-17-5	Ethanol	0.1	-	1

Synonyms : Isopropanol Anhydrous/Isopropyl Alcohol ACS

Grade/Velvasol 425/Value Grade Isopropanol/

Isopropyl Alcohol

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in atten-

dance.

Do not leave the victim unattended.

If inhaled : Consult a physician after significant exposure. If

unconscious place in recovery position and seek

medical advice.

In case of skin contact : If on skin, rinse well with water.

If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Never give anything by mouth to an unconscious per-

son.

If symptoms persist, call a physician.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media

: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical

Unsuitable extinguishing media

: High volume water jet

Specific hazards during firefighting

: Do not allow run-off from fire fighting to enter drains or water courses. No hazardous combustion products are known

Hazardous combustion products

: No hazardous combustion products are known

Specific extinguishing methods

: Use a water spray to cool fully closed containers.

Further information : Collect contaminated fire extinguishing water sepa-

rately. This must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local requ-

lations.

For safety reasons in case of fire, cans should be

stored separately in closed containments.

Special protective equip- ment for firefighters

: Wear self-contained breathing apparatus for firefight- ing if necessary.

NFPA Flammable and Combustible Liquids Classification:

Flammable Liquid Class IB

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Use personal protective equipment.

Ensure adequate ventilation. Remove all sources of ignition.

Evacuate personnel to safe areas.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions

: Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up

: Contain spillage, and then collect with non- combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid formation of aerosol.

Do not breathe vapors/dust.

Avoid exposure - obtain special instructions before

use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in

the application area.

Take precautionary measures against static dis-

charges.

Provide sufficient air exchange and/or exhaust in work

rooms.

Open drum carefully as content may be under pres-

sure.

Dispose of rinse water in accordance with local and

national regulations.

Conditions for safe storage

: No smoking.

Keep container tightly closed in a dry and well- ventilated place.

Containers which are opened must be carefully re- sealed and kept upright to prevent leakage.

Observe label precautions.

Electrical installations / working materials must comp- ly with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parame- ters / Permissi- ble concentra- tion	Basis
67-63-0	Isopropyl alcohol	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1

	TWA	400 ppm 980 mg/m3	OSHA PO
	STEL	500 ppm 1,225 mg/m3	OSHA PO

Biological occupational exposure limits

Components	CAS-No.	Control parame- ters	Biological specimen	Sam- pling time	Permissi- ble con- centratio	Basis
Isopropyl alcohol	67-63-0	Acetone	In urine	End of shift at end of work- week	40 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection: No personal respiratory protective equipment normally

Required

In the case of vapour formation use a respirator with

an approved filter.

Hand protection

Remarks : The suitability for a specific workplace should be dis-

cussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal

processing problems.

Skin and body protection : impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work

place.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless, clear

Odour : alcohol-like

Odour Threshold : 200 ppm

pH : No data available

Freezing Point (Melting point/freezing point)

: -88 °C (-126 °F)

Boiling Point (Boiling point/boiling range)

: 82 °C (180 °F)

Flash point : 12 °C (54 °F)

Evaporation rate : 1.2 n-Butyl

Acetate

Flammability (solid, gas) : No data available

Burning rate : No data available

Upper explosion limit : 12.7 %(V)

Lower explosion limit : 2 %(V)

Vapour pressure : 32 mmHg @ 20 °C (68 °F)

Relative vapour density : 2 @ 20 °C (68 °F)

AIR=1

Relative density : 0.79 @ 20 °C (68 °F)

Reference substance: (water = 1)

Density : 0.79 g/cm3 @ 20 °C (68 °F)

Bulk density : No data available

Solubility(ies)

Water solubility : completely miscible

Solubility in other sol- vents

: No data available

Partition coefficient: n- octanol/water

: log Pow: 0.05 @ 25 °C (77 °F)

Auto-ignition temperature : 399 °C

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : 2.4 mPa.s @ 20 °C (68 °F)

Viscosity, kinematic : 2.6 mm2/s @ 25 °C (77 °F)

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions

of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions

: Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Aldehydes

Chlorine

Ethylene oxide halogens isocyanates Strong acids strong oxidizing

agents

Hazardous decomposition products

: Carbon monoxide, carbon dioxide and unburned

hydrocarbons (smoke).

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : > 40 mg/l

Exposure time: 4 h Test atmosphere:

vapor

Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Components:

67-63-0:

Acute oral toxicity : LD50 (rat): 5,500 mg/kg

Symptoms: ataxia, Vomiting, Pain, hypothermia, Co-

ma, Dizziness

Acute inhalation toxicity : LC50 (rat, male and female): > 10000 ppm

Exposure time: 6 h Test atmosphere:

vapor

Symptoms: Central nervous system depression

GLP: yes

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, cate-

gory 3 with narcotic effects.

Acute dermal toxicity : LD50 (rabbit): > 12,800 mg/kg

64-17-5:

Acute oral toxicity :

Assessment: The component/mixture is toxic after

single ingestion.

Remarks: No data available

Acute inhalation toxicity : Assessment: The component/mixture is toxic

after short term inhalation. Remarks: No data

available

Acute dermal toxicity : Assessment: The component/mixture is toxic

after single contact with skin. Remarks: No data

available

Skin corrosion/irritation

Product: Remarks: May cause skin irritation in

susceptible persons. **Components:**

67-63-0:

Species: rabbit Exposure time: 4 h Method: In vivo

Result: Not irritating to skin Remarks: Not irritating to skin

64-17-5:

Result: Irritating to skin. Remarks: No data available

Serious eye damage/eye irritation

Product:

Remarks: Eye irritation

Components: 67-63-0: Species: rabbit

Result: Irritating to eyes. Exposure time: 24 h Method: In vivo

64-17-5:

Species: rabbit Result:

Eye irritation

Respiratory or skin sensitisation

Components:

67-63-0:

Test Type: Buehler Test Exposure routes: Dermal Species: guinea pig

Assessment: Does not cause respiratory sensitisation.

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

GLP: yes

Remarks: not sensitising

64-17-5:

Test Type: lymph node assay

Species: mouse

Method: OECD Test Guideline 429

GLP: No data available

Remarks: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:

67-63-0:

Genotoxicity in vitro : Test Type: Ames test

Metabolic activation: with and without metabolic acti-

vation

Result: negative

: Test Type: Mammalian cell gene mutation assay Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic activation

Result: negative

GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Test species: mouse (male and female) Application Route: Intraperitoneal

Exposure time: Single

Dose: 0, 350, 1173, 2500, 3500 mg/kg

Result: negative

GLP: yes

Germ cell mutagenicity- Assessment

: Did not show mutagenic effects in animal experiments.

64-17-5:

Genotoxicity in vitro : Test Type: Mammalian cell gene mutation assay

Test species: mouse lymphoma cells

Metabolic activation: with and without metabolic acti-

vation

Method: OECD Test Guideline 476

Result: negative

GLP: No data available

: Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic acti-

vation

Method: OECD Test Guideline 471

Result: negative GLP: No data available

Genotoxicity in vivo : Test Type: Dominant lethal assay

Test species: mouse (male) Application Route: Oral

Dose: 10 or 40% ethanol in water Method: OECD Test Guideline 478

Result: Ambiguous GLP: No data available

Germ cell mutagenicity- Assessment

: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Components:

67-63-0:

Species: rat, (male and female)
Application Route: inhalation (vapour)

Exposure time: 104 wks Activity duration: 6 h

Dose: 0, 500, 2500, 5000 ppm

Frequency of Treatment: 5 days/week

NOAEL: 5,000 ppm

Method: OECD Test Guideline 451

Result: did not display carcinogenic properties

GLP: yes

Species: mouse, (male and female)
Application Route: inhalation (vapour)

Exposure time: 78 wks Activity duration: 6 h

Dose: 0, 500, 2500, 5000 ppm

Frequency of Treatment: 5 days/week

NOAEL: 5,000 ppm

Result: did not display carcinogenic properties

GLP: yes

Carcinogenicity - As- sessment : Not classifiable as a human carcinogen.

64-17-5:

Carcinogenicity - As- sessment

: No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Components:

67-63-0:

Effects on fertility: Test Type: Two-generation study Species: rat,

male and female Dose:

0, 100, 500, 1000 mg/kg bw/d

General Toxicity - Parent: NOAEL: 500 mg/kg body

weight

General Toxicity F1: NOAEL: 500 mg/kg body weight

Fertility: NOAEL: 1,000 mg/kg body weight

Symptoms: Maternal effects. Fetotoxicity. Reduced

offspring weight gain.

Method: OECD Test Guideline 416

Result: Animal testing did not show any effects on

fertility. GLP: yes

Effects on fetal development

: Species: rabbit Application Route: Oral

Dose: 0, 120, 240, 480 mg/kg bw/day Duration of Single Treatment: 13 d

General Toxicity Maternal: NOAEL: 240 mg/kg body weight

Developmental Toxicity: NOAEL: 480 mg/kg Symptoms: Maternal toxicity

Result: No teratogenic effects. GLP: yes

Reproductive toxicity - Assessment

: Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.

64-17-5:

Effects on fertility : Test Type: Two-generation study

Species: mouse, male and female

Application Route: oral

Dose: 5, 10 and 15% v/v in water

General Toxicity - Parent: NOAEL: 15 % diet General Toxicity F1: NOAEL: 10 % diet

Comments and and distance in a Deduced and

Symptoms: reduced litter size Reduced sperm motility

in F1 generation

Method: OECD Test Guideline 416

GLP: No data available

Effects on foetal development

: Species: rat

Application Route: Inhalation

Dose: 10,000, 16,000 or 20,000 ppm

General Toxicity Maternal: NOAEL: 16,000 ppm

Teratogenicity: NOAEL: > 20,000 ppm

Symptoms: No malformations were observed. Method: OECD Test Guideline 414 GLP: No data available

Reproductive toxicity - Assessment

: No evidence of adverse effects on sexual function and fertility, and on development, based on animal experiments.

STOT - single exposure

Target Organs: Central nervous system

Components: 67-63-0:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness.

Components:

No data available

STOT - repeated exposure

Product:

No data available

Components:

No data available

Components: No data available

Repeated dose toxicity

Components:

67-63-0:

Species: rat, male and female

NOAEL: > 5000

Application Route: inhalation (vapour)

Exposure time: 13 wks

Number of exposures: 6 h/d, 5 d/wk

Dose: 0, 100, 500, 1500, 5000 ppm Method: OECD Test Guideline 413 GLP: yes

Symptoms: Central nervous system depression

Species: mouse, male and female

NOAEL: > 5000

Application Route: inhalation (vapour)

Exposure time: 13 wks

Number of exposures: 6 h/d, 5 d/wk Dose: 0, 100, 500, 1500, 5000 ppm Method: OECD Test Guideline 413

GLP: yes

Symptoms: Central nervous system depression

64-17-5:

Species: rat, male and female

NOAEL: 10 ml/kg Application Route: Oral Exposure time: 7 or 14 wk

Number of exposures: 2 times/d, 7 d/wk Dose: 5, 10, 20ml/kg of 16.25% etoh Method: OECD Test Guideline 408

GLP: yes

Aspiration toxicity

Components:

67-63-0:

May be harmful if swallowed and enters airways.

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components: 67-63-0:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 9,640

mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 24 h

Test Type: static test

Toxicity to algae : Remarks: No data available

Toxicity to bacteria : Toxicity threshold (Pseudomonas putida): 1,050 mg/l

Exposure time: 16 h

64-17-5:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)):

15,300 mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates

: EC50 (Ceriodaphnia dubia): 5,012 mg/l Exposure time: 48 h Test

Type: static test

Toxicity to algae : EC50 (Chlorella vulgaris (Fresh water algae)): 275

mg/l

End point: Growth rate Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: No data available

Persistence and degradability

Components:

67-63-0:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 95 %

Method: OECD Test Guideline 301E

Chemical Oxygen De- mand (COD)

: 0.00209 mg/g

Theoritical Oxygen De- mand (ThOD)

: 0.00240 mg/g

64-17-5:

Biodegradability : Result: Readily biodegradable.

Bioaccumulative potential

 $Componen \underline{t}s:$

67-63-0:

Bioaccumulation : Bioconcentration factor (BCF): 3.16

Remarks: Does not significantly accumulate in organ-

isms.

Partition coefficient: n- octanol/water

: log Pow: 0.05 (25 °C)

64-17-5:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Mobility in soil

Components:

67-63-0:

Stability in soil : Remarks: Adsorbs on soil.

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection

of Stratospheric Ozone - CAA Section 602 Class I Sub-

stances

Remarks This product neither contains, nor was manufactured

with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A

+ B).

Additional ecological in- formation

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with all applicable local,

state and federal regulations.

For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact NEXEO's Environmental Services Group

at 800-637-7922.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty

drum.

SECTION 14. TRANSPORT INFORMATION

IATA (International Air Transport Association): UN1219, Isopropanol, 3, II

IMDG (International Maritime Dangerous Goods): UN1219, ISOPROPANOL, 3, II,

Flash Point:12 °C(54 °F)

DOT (Department of Transportation): UN1219, Isopropanol, 3, II

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Flammable liquid, Moderate eye irritant

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards

: Fire Hazard Acute Health Hazard SARA 302 : SARA 302: No chemicals in this material are subject

to the reporting requirements of SARA Title III,

Section 302.

SARA 313 : SARA 313: This material does not contain any chemi-

cal components with known CAS numbers that exceed the threshold (De Minimis) reporting levels estab-

lished by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

67-63-0	Isopropyl alcohol	100 %
64-17-5	Ethanol	0.1 %
71-23-8	n-Propanol	0.015 %

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. Clean-Water Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

67-63-0 Isopropyl alcohol 90 - 100 %

Pennsylvania Right To Know

67-63-0 Isopropyl alcohol 90 - 100 %

New Jersey Right To Know

67-63-0	Isopropyl alcohol	90 - 100 %
64-17-5	Ethanol	0.1 - 1 %

California Prop 65 This product does not contain any chemicals known to

State of California to cause cancer, birth defects, or

any other reproductive harm.

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

1907/2006 (EU)	:	n (Negative listing) (Not in compliance with the inventory)
Switzerland. New notified substances and declared preparations	:	y (positive listing) (The formulation contains substances listed on the Swiss Inventory)
United States TSCA Inventory	:	y (positive listing) (On TSCA Inven- tory)
Canadian Domestic Substances List (DSL)	:	y (positive listing) (All components of this product are on the Canadian DSL.)
Australia Inventory of Chemical Substances (AICS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
New Zealand. Inventory of Chemical Substances	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Japan. ISHL - Inventory of Chemical Substances (METI)	:	y (positive listing) (On the inventory, or

		(On the inventory, or in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Japan. ISHL - Inventory of Chemical Substances (METI)		y (positive listing) (On the inventory, or in compliance with the inventory)
Korea. Korean Existing Chemicals Inventory (KECI)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)

China. Inventory of Existing Chemical Substances in	:	y (positive listing)
China (IECSC)		(On the inventory, or
		in compliance with
		the inventory)

SECTION 16. OTHER INFORMATION

Full Text of H-phrases: see section 16:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H319	Causes serious eye irritation
H335	May cause respiratory irritation

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating

Health: 1 Slight Hazard - Irritation or minor reversible injury possible Flammability: 3 Serious Hazard - Materials capable of ignition under almost all

normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB

& IC)

Physical: 0 Minimal Hazard - Materials that are normally stable, even under

fire conditions, and will NOT react with water, polymerize,

decompose, condense, or self-react. Non-Explosives.

Personal Protection: H - Splash goggles, Gloves, Synthetic apron, Vapor respirator

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Key or legend to abbreviations and acronyms used in the safety data sheet					
ACGIH	American Conference of Gov-	LD50	Lethal Dose 50%		
	ernment Industrial Hygienists				

AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Sub- stances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Sub- stances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration



ISOPROPYL GAS LINE ANTI-FREEZE: B-IPA

SAFETY DATA SHEET

Issue Date: 3/10/2016 Revised: 4/5/2016

EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Exist- ing Chemical Substances	PICCS	Philipines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concen- tration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Compositon, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50		Lethal Concentration 50%	