






SAFETY DATA SHEET

1. Product and Company Identification

PRODUCT NUMBER:	2929	COMPANY PHONE:	1-800-241-8180
PRODUCT NAME:	FUEL PLUS X-100	EMERGENCY TELEPHONE:	1-800-241-8180
PRODUCT DESCRIPTION:	Gasoline and Diesel Fuel Conditioner Concentrate	INFOTRAC:	1-800-535-5053
COMPANY INFORMATION:	PRO CHEM, INC. 1475 Bluegrass Lakes Parkway Alpharetta, GA 30004		

2. Hazards Identification

GHS CLASSIFICATION: Flammable liquids: Category 3 Skin irritation: Category 2 Serious eye damage: Category 1 Specific target organ toxicity - single exposure: Category 2 Specific target organ toxicity - repeated exposure: Category 2 Aspiration hazard: Category 1	SIGNAL WORD: DANGER	SYMBOL:			
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HAZARD STATEMENTS:

Flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye damage.
May cause damage to organs.
May cause damage to organs through prolonged or repeated exposure.

PRECAUTIONARY STATEMENTS:

Prevention:

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash skin thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Wear protective gloves/eye protection/face protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF EXPOSED OR YOU FEEL UNWELL: Call a POISON CENTER or doctor/physician.
Get medical advice/attention if you feel unwell.
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
IN CASE OF FIRE: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

STORAGE:

Store in a well-ventilated place. Keep cool.
Store locked up.

DISPOSAL:

Dispose of contents/container in accordance with local regulation.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

3. Composition / Information on Ingredients

CHEMICAL NAME	CAS	Concentration % by Weight
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	>= 70 - < 90
butan-2-ol	78-92-2	>= 10 - < 20
Cresol	1319-77-3	>= 1 - < 5
Cyclohexanone	108-94-1	>= 1 - < 5

4. First Aid Measures

EMERGENCY OVERVIEW

WARNING: Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

EYES: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

SKIN: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

INHALATION:

Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.

INGESTION:

Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

5. Fire-Fighting Measures

SUITABLE FIRE EXTINGUISHING MEDIA:

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

UNSUITABLE FIRE EXTINGUISHING MEDIA:

High volume water jet.

HAZARDOUS COMBUSTION PRODUCTS:

Carbon dioxide (CO₂). Carbon monoxide. Smoke.

SPECIFIC FIRE-FIGHTING METHODS:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons, in case of fire cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental Release Measures

PERSONAL PRECAUTIONS:

Use personal protective equipment. Ensure adequate ventilation. Refer to protective measures listed in Sections 7 and 8.

ENVIRONMENTAL PRECAUTIONS AND CLEAN-UP METHODS:

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. 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). Keep in suitable, closed containers for disposal.

7. Handling and Storage

SAFE HANDLING PRACTICES:

Avoid formation of aerosol. Do not breathe vapours/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. Provide sufficient air exchange and/or exhaust in workrooms. Container may be opened only under exhaust ventilation hood. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations.

SAFE STORAGE:

No smoking. Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations/working materials must comply with the technological safety standards.

MATERIALS TO AVOID:

Oxidizing agents. Do not freeze.

8. Exposure Controls / Personal Protection

Components	CAS #	Value Type (form of exposure)	Control Parameters/Permissible Concentration	Basis
butan-2-ol	78-92-2	TWA	100 ppm	ACGIH
		TWA	100 ppm	NIOSH REL
		ST	305 mg/m ³	NIOSH REL
		ST	150 ppm	NIOSH REL
		TWA	455 mg/m ³	OSHA Z-1
		TWA	150 ppm	OSHA Z-1
Cresol	1319-77-3	TWA	450 mg/m ³	OSHA P0
		TWA	100 ppm	OSHA P0
		TWA	305 mg/m ³	OSHA Z-1
Cyclohexanone	108-94-1	TWA	5 ppm	OSHA Z-1
		STEL	22 mg/m ³	ACGIH
		TWA	20 ppm	ACGIH
		TWA	50 ppm	NIOSH REL
		TWA	25 ppm	NIOSH REL
		TWA	100 mg/m ³	OSHA Z-1
		TWA	50 ppm	OSHA Z-1
		TWA	200 mg/m ³	OSHA P0
		TWA	25 ppm	OSHA P0
			100 mg/m ³	

BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS

Components	CAS #	Control Parameters	Biological Specimen	Sampling Time	Permissible Concentration	Basis
CYCLOHEXANONE	108-94-1	1,2-	Urine	End of shift at end of workweek	80 mg/l	ACGIH BEI

CYCLOHEXANONE

Cyclohexanediol
Cyclohexanol

Urine

End of shift (As soon as possible
after exposure ceases)

8 mg/l

ACGIH BEI

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: Eyewash bottle with pure water. Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems.

SKIN PROTECTION: Skin should be washed after contact. For prolonged or repeated contact use protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.

HYGIENE MEASURES: When using, do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

9. Physical & Chemical Properties

APPEARANCE:	Liquid.	FLASH POINT:	23.3°C; Method: TCC
Color:	Clear, red.	EVAPORATION RATE:	2
ODOR:	Characteristic.	Explosive Limit – lower (%):	No data available.
ODOR THRESHOLD:	No data available.	Explosive Limit – upper (%):	No data available.
pH:	No data available.	VAPOR PRESSURE:	200 hPa
MELTING/FREEZING POINT:	No data available.	RELATIVE VAPOR DENSITY:	No data available.
BOILING POINT:	120°C	DENSITY:	0.89 g/cm ³
PARTITION COEFFICIENT (n-octanol/water):	No data available.	SOLUBILITY (water):	Negligible.
VISCOSITY, KINEMATIC:	No data available.	AUTO-IGNITION TEMP:	Not determined.
SOLUBILITY (other solvents):	Not determined.	THERMAL DECOMPOSITION:	No data available.

10. Stability & Reactivity Information**REACTIVITY:**

Stable. No decomposition if stored and applied as directed.

CHEMICAL STABILITY:

Stable under normal conditions. No decomposition if stored and applied as directed.

POSSIBILITY OF HAZARDOUS REACTIONS:

No hazards to be specifically mentioned. No decomposition if stored and applied as directed. Vapours may form explosive mixture with air.

INCOMPATIBLE MATERIALS:

Strong oxidizing agents.

CONDITIONS TO AVOID:

Heat, flames, and sparks.

DECOMPOSITION PRODUCTS:

Carbon monoxide, carbon dioxide, and unburned hydrocarbons (smoke).

11. Toxicological Information**ACUTE TOXICITY:****Product:**

Acute oral toxicity estimate: 2,869 mg/kg.
Method: Calculation method/
> 40 mg/l.

Acute inhalation toxicity estimate: > 40 mg/l.
Exposure time: 4 h.
Test atmosphere: vapour.
Method: Calculation method.
Acute dermal toxicity estimate: > 5,000 mg/kg.
Method: Calculation method.

Components:**butan-2-ol:**

Acute oral toxicity: LD50 Oral rat: 2,193 mg/kg
Acute dermal toxicity: LD50 Dermal rat: > 2,000 mg/kg

SKIN CORROSION/IRRITATION:

Extremely corrosive and destructive to tissue.

SERIOUS EYE DAMAGE/EYE IRRITATION:

May cause irreversible eye damage.

RESPIRATORY OR SKIN SENSITIZATION:

No data available.

GERM CELL MUTAGENICITY:

No data available.

CARCINOGENICITY:

IARC: No component of this product presents 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 presents at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA: No component of this product presents 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 presents at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

REPRODUCTIVE TOXICITY:

No data available.

Distillates (petroleum), hydrotreated light naphthenic:

butan-2-ol:

cresol:

cyclohexanone:

STOT - single exposure:

No data available.

STOT - repeated exposure:

No data available.

ASPIRATION TOXICITY:

No data available.

FURTHER INFORMATION:

No data available. 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.

12. Ecological Information

ECOTOXICITY:

No data available.

PERSISTENCE AND DEGRADABILITY:

No data available.

BIOACCUMULATIVE POTENTIAL:

Product:

Partition coefficient: n-octanol/water: No data available.

Component:

butan-2-ol:

Partition coefficient: n-octanol/water: log Pow: 0.146.

cyclohexanone:

Partition coefficient: n-octanol/water: log Pow: 0.81.

MOBILITY IN SOIL:

No data available.

OTHER ADVERSE EFFECTS:

No data available.

Product:

Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

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 INFORMATION:

No data available.

13. Disposal Consideration

WASTE FROM RESIDUES:

Dispose of in accordance with local regulations. Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

CONTAMINATED PACKAGING:

Empty remaining contents. Dispose of as unused product. Do not reuse empty containers. Do not burn, or use a cutting torch on, the empty drum.

14. Transportation Information

INTERNATIONAL REGULATION:

IATA-DGR:

UN/ID No. 1993

Proper shipping name: Flammable liquid, n.o.s. (Distillates (petroleum), hydrotreated light naphthenic).

Class: 3

Packing group: III

Labels: 3

Packing instruction (cargo aircraft): 366

Packing instruction (passenger aircraft): 355

IMDG-CODE:

UN Number: 1993

Proper shipping name: FLAMMABLE LIQUID, N.O.S. (distillates (petroleum), hydrtreated light naphthenic).

Class: 3

Packing group: III

Labels: 3

EmS code: F-E, S-E

Marine pollutant: No.

TRANSPORT IN BUL ACCORDING TO Annex II of MARPOL 73/78 and the IBC Code:

Not applicable for product as supplied.

NATIONAL REGULATIONS: 49 CFR:

UN/ID/NA #: 1993

Proper shipping name: Flammable liquids, n.o.s.

Class: 3

Packing group: III
Labels: 3
ERG CODE: 128
Marine pollutant: No.
SPECIAL PRECAUTIONS FOR USER:
 Not applicable.

15. Regulatory Information

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

CERCLA Reportable Quantity

COMPONENTS	CAS #	COMPONENT RQ (lbs):	CALCULATED PRODUCT RQ (lbs)
Cresol	1319-77-3	100	4207

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:
 No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313:
 The following components are subject to reporting levels established by SARA Title III, Section 313:

butan-2-ol	78-92-2	19.532 %
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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:

TSCA	On TSCA Inventory
DSL	All components of this product are on the Canadian DSL.
AICS	On the inventory, or in compliance with the inventory
NZIoC	On the inventory, or in compliance with the inventory
PICCS	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory

Inventory Acronym and Validity Area Legend:
 AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

16. Other Information

N/A = Not Applicable; N/D = Not Determined

NFPA	Health Hazards: 3	Flammability: 3	Instability: 0	Physical & Chemical Properties:
HMIS	Health Hazards: 3*	Flammability: 3	Physical hazards: 0	Personal protection:

0 = not significant, 1 =Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

DISCLAIMER:
 To the best of our knowledge, information contained herein is accurate. However, there is no assumption of liability 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 hazard, which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product, which may not be covered by this SDS. The user is responsible for full compliance.