

MATERIAL SAFETY DATA SHEET

G155
Revision Number 3. Revision Date 1/2/07

Product code G155
Product name X-200 Concentrated Fuel Conditioner
Chemical characterization Liquid.
Manufacturer, importer, supplier Manufactured for:
 Chemax Corporation
 PO Box 7453
 Beaumont, TX 77726
 Phone: 800-346-0132
EMERGENCY TELEPHONE NUMBER 409-866-4232

Emergency Overview:

- DANGER:
- Flammable liquid
- Ensure adequate ventilation
- Keep away from open flames, hot surfaces and sources of ignition
- May be harmful or fatal if swallowed
- Irritating to eyes and skin.
- KEEP OUT OF REACH OF CHILDREN

HMIS (Hazardous Material Information System)	Health=2; Fire=3; Reactivity=0 Personal protective equipment = B
Eye contact	Irritating to eyes. May cause chemical burn.
Skin contact	Irritating to skin. May cause chemical burn.
Inhalation	Inhalation may cause headaches, nausea, dizziness, and/or drowsiness.
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
General advice	Avoid contact with skin and eyes. Avoid breathing vapors or mists.
Principle Routes of Exposure	Inhalation and Skin contact

CAS	Chemical Name	% Weight	OSHA*	ACGIH TLV (ppm)
64742-53-6	Petroleum distillates, hydrotreated light naphthenic	70 - 80	5 mg/m3 (mist)	5 mg/m3 (mist)
78-92-2	sec-Butyl alcohol	15 - 25	150 ppm	100 ppm
1319-77-3	Cresol	< 5.0	5 ppm	5 ppm
108-94-1	Cyclohexanone	< 5.0	50 ppm	20 ppm

* OSHA - PELs

Skin contact	<ul style="list-style-type: none"> • Remove and wash contaminated clothing before re-use • Wash off with soap and water • If skin irritation persists, call a physician
Eye contact	<ul style="list-style-type: none"> • Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. • If eye irritation persists, consult a specialist
Inhalation	<ul style="list-style-type: none"> • Move to fresh air • If not breathing, give artificial respiration

Ingestion

- Consult a physician
- DO NOT INDUCE VOMITING
- Never give anything by mouth to an unconscious person
- Clean mouth with water and afterwards drink plenty of water
- Call a physician or Poison Control Centre immediately

Aggravated Medical Conditions

- May aggravate existing eye, skin, or upper respiratory conditions

NFPA (National Fire Protection Association)

Health=2; Fire=3; Reactivity=0; Special = -

Flammability as per USA Flame Projection Test (aerosols)

Not Applicable

Flash point (non-aerosols)

83°F(28.33 °C)

Suitable extinguishing media

Dry chemical (preferred). Carbon dioxide (CO2). Water spray.

Extinguishing media which must not be used for safety reasons

None

Specific Hazards

Keep product and empty container away from heat and sources of ignition

Special protective equipment for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific methods

Water mist may be used to cool closed containers.

Personal precautions

Ensure adequate ventilation, especially in confined areas. Wear personal protective equipment.

Environmental precautions

Contain spills. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Remove all sources of ignition. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Take up mechanically and collect in suitable container for disposal.

Handling

Safe handling advice

Remove all sources of ignition. Avoid prolonged exposure to mist and vapours.

Storage

Technical measures/Precautions

KEEP OUT OF REACH OF CHILDREN. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. Keep away from heat and sources of ignition.

Engineering measures

Ensure adequate ventilation, especially in confined areas

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

Hand protection

Neoprene gloves

Eye protection

goggles or safety glasses

Skin and body protection

oil-resistant apron

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.
 Keep away from food and drink
 Wash hands before breaks and at the end of workday
 When using, do not eat, drink or smoke.
 Keep working clothes separately

General Information

Form	Liquid
Appearance	Clear
Colour	red
Odour	Oily

Important Health Safety and Environmental Information

Specific Gravity	0.89
Density @ 68°F (20 °C)	7.42 lbs/gal
pH	N/A
Boiling point/range	120°F(48.9 °C)
Flash point	83°F(28.33 °C)
Vapour pressure	200mm Hg @ 78F / 20C.
Vapour density	4 (air = 1).
Water solubility	negligible.
Evaporation Rate	2.0 (butyl acetate = 1)
VOC Content(%)	21-23%; per US EPA Definition - no category

ACTIVITY	
Stability	Stable under normal conditions
Conditions to avoid	Oxidizing atmospheres. Heat, flames and sparks.
Materials to avoid	Strong oxidizing agents
Hazardous decomposition products	Carbon oxides
Polymerization	Hazardous polymerization does not occur

Acute toxicity**Component Information**

CAS	Chemical Name	% Weight	NIOSH - Selected LD50s and LC50s
64742-53-6	Petroleum distillates, hydrotreated light naphthenic	70 - 80	N/A
78-92-2	sec-Butyl alcohol	15 - 25	Oral LD50 Rat: 2193 mg/kg
1319-77-3	Cresol	< 5.0	Oral LD50 Rat: 1454 mg/kg; Dermal LD50 Rabbit: 2 g/kg
108-94-1	Cyclohexanone	< 5.0	Inhalation LC50 Rat: 8000 ppm/4H; Oral LD50 Rat: 1620 µL/kg; Dermal LD50 Rabbit: 1 mL/kg

Product Information

LD50/oral/rat =	Not Determined
LD50/dermal/rat =	Not Determined
Local effects	
Skin irritation	Irritating to skin
Eye irritation	Eye irritation
Inhalation	Excessive inhalation may cause irritation of respiratory tract.
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Sensitization	May cause sensitization of susceptible persons.
Chronic toxicity	Liver and kidney injuries may occur with prolonged and repeated exposure

Ecotoxicity effects

Component Information

CAS	Chemical Name	% Weight	EFFSD*
64742-53-6	Petroleum distillates, hydrotreated light naphthenic	70 - 80	N/A
78-92-2	sec-Butyl alcohol	15 - 25	96 Hr LC50 fathead minnow: 3670 mg/L (flow-through)
1319-77-3	Cresol	< 5.0	96 Hr LC50 fathead minnow: 12.8 mg/L (flow-through)
108-94-1	Cyclohexanone	< 5.0	96 Hr LC50 fathead minnow: 527.0 mg/L (flow-through); 96 Hr LC50 rainbow trout: 90.0 mg/L; 96 Hr LC50 rainbow trout: 44.0 mg/L

* EFFSD - Ecotoxicity - Freshwater Fish Species Data

Product Information

Aquatic toxicity Not Determined.

Other Information:

Ozone depletion potential; ODP; (R-11 = 1)	Not Determined.
Global warming potential (GWP)	Not Determined.
Additional ecological Information	Not Determined.
Mobility	Not Determined
Bioaccumulative potential	Not Determined

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Keep product and empty container away from heat and sources of ignition.

DOT INFORMATION

DOT

UN Number UN1993
Proper shipping name Flammable liquid, n.o.s., 3
Packing group III
Subsidiary Risk Not Applicable
Description Petroleum Oil

IATA

UN Number UN1993
Proper shipping name Flammable liquid, n.o.s., 3
Packing group III
Subsidiary Risk Not Applicable
Description Petroleum Oil

TDG

UN Number UN1993
Proper shipping name Flammable liquid, n.o.s., 3
Packing group III
Subsidiary Risk Not Applicable
Description Petroleum Oil

U.S. Inventories

CAS	Chemical Name	% Weight	CPCL*	IARC*	CERCLA/SARA RA*	SARA III	TSCA*
64742-53-6	Petroleum distillates, hydrotreated light naphthenic	70 - 80	N/A	N/A	N/A	No	Present
78-92-2	sec-Butyl alcohol	15 - 25	N/A	N/A	N/A	Yes	Present
1319-77-3	Cresol	< 5.0	N/A	N/A	100 lb final RQ; 45.4 kg final RQ	Yes	Present
108-94-1	Cyclohexanone	< 5.0	N/A	Monograph 71, 1999; Monograph 47, 1989	5000 lb final RQ; 2270 kg final RQ	No	Present

* CPCL - California - Proposition 65 - Carcinogens List

* IARC - Group 3 (Not classifiable)

* CERCLA/SARA - Hazardous Substances and their Reportable Quantities

* TSCA - United States - Section 8 (b) Inventory (TSCA)

International Inventories

CAS	Chemical Name	% Weight	DSL - Canada*	WHMIS*
64742-53-6	Petroleum distillates, hydrotreated light naphthenic	70 - 80	Present	N/A
78-92-2	sec-Butyl alcohol	15 - 25	Present	B2, D2B
1319-77-3	Cresol	< 5.0	Present	B3, D1A, E
108-94-1	Cyclohexanone	< 5.0	Present	B3, D1B, D2B

* DSL - Canada - Domestic Substances List (DSL)

* WHMIS - Canada - WHMIS - Classifications of Substances

OTHER INFORMATION

Prepared By

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, Regulatory Department. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.

End of Safety Data Sheet