

GAP PROFESSIONAL PRODUCTS

Safety Data Sheet Concentrated Fuel System Cleaner

SECTION 1: Identification

1.1 GHS Product identifier

Product name Concentrated Fuel System Cleaner

Product number 20317

Brand GAP Professional Products

1.3 Recommended use of the chemical and restrictions on use

Concentrated Fuel System Cleaner

Professional Automotive, Industrial, or Commercial uses Only. Not for general consumer use.

1.4 Supplier's details

Name GAP Professional Products

Address 122 Route 105

Keswick Ridge NB E6L 1B1

Canada

Telephone (506) 363-9708 Fax (506) 363-4241 email info@gapauto.com

1.5 Emergency phone number

For Medical or Transport Emergencies

CANUTEC (24 Hours) (613) 996-6666

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: WHMIS 2015

- Serious eye damage/eye irritation, Cat. 2B
- Skin corrosion/irritation, Cat. 2
- Skin sensitizer, Cat. 1
- Carcinogenicity, Cat. 1B
- Acute toxicity, inhalation, Cat. 5
- Acute toxicity, oral, Cat. 5
- Carcinogenicity, Cat. 2

- Serious eye damage/eye irritation, Cat. 2

2.2 GHS label elements, including precautionary statements

Pictograms



1. Exclamation mark; 2. Health hazard

Signal word	Danger
Signal Word	Danger

н	272	rd	sta	ten	ner	t/c	١
п	aza	ıu	SLA	ten	nei	ILIS	

ilazai a statellielit(s)	
H303	May be harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H333	May be harmful if inhaled
H350	May cause cancer [route]
H351	Suspected of causing cancer [route]

Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water/
P304+P312	IF INHALED: Call a POISON CENTER/doctor/ if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,
	if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor/ if you feel unwell.
P321	Specific treatment (see on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container to

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Component Concentration

Heavy aromatic naphtha (CAS no.: 101631-19-0; EC no.: 309-944-0; Index no.: 649-434-00-8)

CLASSIFICATIONS: Aspiration hazard, Cat. 1. HAZARDS: H304 - May be fatal if swallowed and enters airways.

XYLENES (MIXED) (CAS no.: 1330-20-7; EC no.: 215-535-7; Index no.: 601-022-00-9)

65 - 85 % (weight) 5 - 10 % (weight)

CLASSIFICATIONS: Flammable liquids, Cat. 3; Acute toxicity, inhalation, Cat. 4; Acute toxicity, dermal, Cat. 4; Skin corrosion/irritation, Cat. 2. HAZARDS: H226 - Flammable liquid and vapor; H312 - Harmful in contact with skin; H315 - Causes skin irritation; H332 - Harmful if inhaled. [SCLs/M-factors/ATEs]:

NAPHTHALENE (CAS no.: 91-20-3; EC no.: 202-049-5; Index no.: 601-052-00-2)

5 - 10 % (weight)

CLASSIFICATIONS: Carcinogenicity, Cat. 2; Acute toxicity, oral, Cat. 4; Hazardous to the aquatic environment, short-term (acute), Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 1. HAZARDS: H302 - Harmful if swallowed; H351 - Suspected of causing cancer [route]; H400 - Very toxic to aquatic life; H410 - Very toxic to aquatic life with long lasting effects.

1,2,3-trimethylbenzene (CAS no.: 526-73-8; EC no.: 208-394-8)

< 5 % (weight)

CLASSIFICATIONS: No data available. HAZARDS: No data available.

1,2,4-trimethylbenzene (CAS no.: 95-63-6; EC no.: 202-436-9; Index no.: 601-043-00-3)

< 5 % (weight)

CLASSIFICATIONS: Flammable liquids, Cat. 3; Acute toxicity, inhalation, Cat. 4; Specific target organ toxicity following single exposure, Cat. 3; Skin corrosion/irritation, Cat. 2; Serious eye damage/eye irritation, Cat. 2; Hazardous to the aquatic environment, long-term (chronic), Cat. 2. HAZARDS: H226 - Flammable liquid and vapor; H315 - Causes skin irritation; H319 - Causes serious eye irritation; H332 - Harmful if inhaled; H335 - May cause respiratory irritation; H411 - Toxic to aquatic life with long lasting effects.

Cumene (CAS no.: 98-82-8; EC no.: 202-704-5; Index no.: 601-024-00-X)

< 5 % (weight)

CLASSIFICATIONS: Flammable liquids, Cat. 3; Aspiration hazard, Cat. 1; Specific target organ toxicity following single exposure, Cat. 3; Hazardous to the aquatic environment, long-term (chronic), Cat. 2. HAZARDS: H226 - Flammable liquid and vapor; H304 - May be fatal if swallowed and enters airways; H335 - May cause respiratory irritation; H411 - Toxic to aquatic life with long lasting effects.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled If affected, remove individual to fresh air. If breathing is difficult, administer oxygen.

If breathing has stopped, give artifical respiration. Keep person warm, quiet, and

get medical attention

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and

plenty of water. Consult a physician if symptoms occur. Wash contaminated clothes

before reuse

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact

lenses if easy to do. Get medical attention if symptoms occur.

If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.

4.2 Most important symptoms/effects, acute and delayed

Mild tissue inflammation, rash, nausea.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Treat surrounding material. Regular foam, Water Spray, Water Fog, carbon dioxide or dry chemical. Spray using fog nozzles. Keep containers cool with water. Use caution when applying carbon dioxide in confined spaces.

5.2 Specific hazards arising from the chemical

Vapors/fumes may be irritating, corrosive, and/or toxic. Fire fighters must be protected from smoke with self contained breathing apparatus. Heavy smoke may obscure vision. Smoke may contain oxides of carbon, nitrogen, sulfur, and chlorine.

5.3 Special protective actions for fire-fighters

Wear full protective clothing and self-contained breathing apparatus. Use water spray to cool exposed containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs. See Secrtion 8 for recommended personel protective equipment.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

LARGE SPILLS: Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent. SMALL SPILLS: Contain and absorb with absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. Dispose in suitable waste container.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container(s) tighly closed. Use and store this material at room temperature away from sources of ignition, heat, direct sunlight and hot surfaces. Keep away from any incompatible materials (see section 10)

Specific end use(s)

Store in original container. Store as directed by manufacturer

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Naphthalene (CAS: 91-20-3)

PEL (Inhalation): 10 ppm (CA/CCOHS)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 50 mg/m3 (CA/CCOHS)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 10 ppm, (ST) 15 ppm (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 10 ppm, (ST) 15 ppm (NIOSH) OSHA Annotated Table Z-1, www.osha.gov

2. Cumene (CAS: 98-82-8)

PEL (Inhalation): 50 ppm (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 245 mg/m3 (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 50 ppm (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 50 ppm (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

TLV® (Inhalation): 50 ppm; USA (ACGIH) OSHA Annotated Table Z-1, www.osha.gov

3. XYLENES (MIXED) (CAS: 1330-20-7)

PEL (Inhalation): 100 ppm (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 435 mg/m3 (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 100 ppm, (ST) 150 ppm, (C) 300 ppm (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 100 ppm, (ST) 150 ppm (NIOSH) OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Showers, eyewash stations, and ventilation systems should be present and in good working order. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eve/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Wear Nitrile gloves, chemical resistant gloves.

Respiratory protection

Recommended: Dust mask or Respirator should be worn if product is used in confined space or used for a prolonged period of time.

SECTION 9: Physical and chemical properties

Appearance, such as physical state and colour

Odour

Odour threshold

рΗ

Melting point and freezing point

Initial boiling point and boiling range

Flash point Evaporation rate

Flammability, in the case of solids and gases

Clear slightly hazy liquid

Characteristic Not determined

N/A oil based < -50 °C (-58 °F)

179 - 217 °C (354 - 423 °F) 61 - 66 °C (142 - 151 °F)

<1 (Butyl Acetate Not Determined

Upper and lower flammability or explosive limits

Upper explosion limit: 7 %(V)

Lower explosion limit

: 0.6 %(V)

Vapour pressure < 10 mmHg @ 20 °C (68 °F)

Vapour density Not Determined Relative density 0.8-0.9 kg/l 60C

Solubility Insoluble

Partition coefficient — n-octanol/water Log KOW > 4 (mineral oil data)

Auto-ignition temperature Not Determined Decomposition temperature Not Available

Viscosity 1.2 - 1.36 mm2/s @ 25 °C (77 °F)

Additional properties

Physical state Liquid Colour Amber

Explosive properties Not Determined

Oxidising properties None

SECTION 10: Stability and reactivity

10.1 Reactivity

None under normal use conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Stable under normal use conditions.

10.4 Conditions to avoid

Avoid storing in direct sunlight and avoid extremes of temperature.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Oxides of carbon, oxides of sulfur, oxides of phosphorus, oxides of nitrogen, amines, aliphatic compounds, toxic by-products.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

64742-94-5:

Acute oral toxicity

:

LD50 (Rat, male and female): > 5,000 mg/kg

Assessment: The substance or mixture has no acute oral tox-icity

Acute inhalation toxicity

:

LC50 (Rat, male and female): > 5.28 mg/l

Exposure time: 4 h Test atmosphere: gas

Assessment: The substance or mixture has no acute inhala-tion toxicity

Acute dermal toxicity

:

Skin corrosion/irritation

LD50 (Rabbit, male and female): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal toxicity

Heavy aromatic naphtha Inhalation - 5.28 mg/l/4h - 4h

Serious eye damage/irritation

Not Determined

Respiratory or skin sensitization

Acute inhalation toxicity

Heavy aromatic naphtha Inhalation - 5.28 mg/l/4h - 4h

LC50 (Rat, male and female): > 5.28 mg/l

Exposure time: 4 h
Test atmosphere: gas

Assessment: The substance or mixture has no acute inhala-tion toxicity

May be fatal if swallowed and enters airways.

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vom-iting. Concentrations substantially above the TLV value may cause narcotic effects.

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity (STOT) - single exposure

HYDROCRACKED PARAFFINIC MINERAL OIL: No Data Available;

AROMATIC HYDROCARBON: Cat 3 Transient Toxicant - CNS, Liver, Kidneys; TRADE SECRET COMPONENT: Cat 3 Transient Toxicant - CNS, Liver, Kidneys

Specific target organ toxicity (STOT) - repeated exposure

HYDROCRACKED PARAFFINIC MINERAL OIL: No Data Available;

AROMATIC HYDROCARBON: No Data Available; TRADE SECRET COMPONENT: No Hazard

Aspiration hazard

HYDROCRACKED PARAFFINIC MINERAL OIL: Cat 1 Aspiration Hazard;

AROMATIC HYDROCARBON: Cat 1 Aspiration Hazard;

TRADE SECRET COMPONENT: No Hazard

Additional information

METHYL ETHYL KETONE: *TOXICITY: typ. dose mode specie amount units other

TCLo ihl hmn 100 ppm/5M LC50 ihl mus 40 gm/m3/2H LC50 ihl rat 23500 mg/m3/8H LDLo ipr gpg 2000 mg/kg LD50 ipr mus 616 mg/kg

LD50 orl mus 4050 mg/kg

LD50 orl rat 2737 mg/kg

LD50 skn rbt 6480 mg/kg

LC50 ihl mam 38 gm/m3

LD50 ipr rat 607 mg/kg

*AQTX/TLM96: over 1000 ppm

*SAX TOXICITY EVALUATION:

THR: Moderately toxic by ingestion, skin contact and intraperitoneal routes.

Human systemic effects by inhalation. An experimental teratogen.

Experimental reproductive effects. A strong irritant. Human eye irritation @ 350 ppm. Affects peripheral nervous system and central nervous

system.

*CARCINOGENICITY: Not available

*MUTATION DATA:

test lowest dose | test lowest dose

----- | ------

sln-smc 33800 ppm |

*TERATOGENICITY:

Reproductive Effects Data:

TCLo: ihl-rat 3000 ppm/7H (6-15D preg) TCLo: ihl-rat 1000 ppm/7H (6-15D preg)

*STANDARDS, REGULATIONS & RECOMMENDATIONS:

OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z

Transitional Limit: PEL-TWA 200 ppm [610]

Final Limit: PEL-TWA 200 ppm; STEL 300 ppm [610]

ACGIH: TLV-TWA 200 ppm; STEL 300 ppm [015,415,421,610]

NIOSH Criteria Document: Recommended Exposure Limit to this compound-air:

TWA 200 ppm [610]

NFPA Hazard Rating: Health (H): 1

Flammability (F): 3 Reactivity (R): 0

H1: Materials only slightly hazardous to health (see NFPA for details).

F3: Materials which can be ignited under almost all normal temperature conditions (see NFPA for details).

RO: Materials which are normally stable even under fire exposure conditions and which are not reactive with water (see NFPA for details).

*OTHER TOXICITY DATA:

Skin and Eye Irritation Data:

eye-hmn 350 ppm skn-rbt 500 mg/24H MOD skn-rbt 402 mg/24H MLD skn-rbt 13780 ug/24H open MLD

eye-rbt 80 mg

Review: Toxicology Review

Standards and Regulations: DOT-Hazard: Flammable liquid; Label: Flammable liquid

Status: EPA Genetox Program 1988, Inconclusive: B subtilis rec assay

EPA TSCA Chemical Inventory, 1986

EPA TSCA 8(a) Preliminary Assessment Information, Final Rule EPA TSCA Test Submission (TSCATS) Data Base, January 1989

NIOSH Analytical Methods: see 2-Butanone, 2500

NIOSH Analytical Methods: see 2-Butanone, Ethanol, and Toluene in

blood, 8002

Meets criteria for proposed OSHA Medical Records Rule

NAPHTHALENE: *TOXICITY:

typ. dose mode specie amount units other

LDLo orl chd 100 mg/kg

LDLo unr man 74 mg/kg

LD50 orl rat 490 mg/kg

LD50 orl mus 533 mg/kg

LD50 scu mus 969 mg/kg

LDLo orl dog 400 mg/kg

LDLo orl cat 1000 mg/kg

LDLo orl rbt 3 gm/kg

LD50 orl gpg 1200 mg/kg

LDLo unr hmn 29 mg/kg

LD50 ipr mus 150 mg/kg

LD50 ivn mus 100 mg/kg

*AQTX/TLM96: Not available

*SAX TOXICITY EVALUATION:

THR: Human poison by ingestion and possibly other routes. Experimental poison by ingestion, intravenous and intraperitoneal routes. Moderately toxic by subcutaneous route. An experimental tumorigen. Experimental reproductive effects. Mutagenic data. An eye and skin irritant.

*CARCINOGENICITY:

Tumorigenic Data:

TDLo: scu-rat 3500 mg/kg/12W-I

Status: NTP Carcinogenesis Studies; on test (two year studies), January 1988

*MUTATION DATA:

test lowest dose | test lowest dose

------ | -------

Not available |

*TERATOGENICITY:

Reproductive Effects Data:

TDLo: ipr-rat 5925 mg/kg (1-15D preg)
TDLo: orl-mus 2400 mg/kg (7-14D preg)

*STANDARDS, REGULATIONS & RECOMMENDATIONS:

OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z

Transitional Limit: PEL-TWA 10 ppm [610]
Final Limit: PEL-TWA 10 ppm; STEL 15 ppm [610]

ACGIH: TLV-TWA 10 ppm; STEL 15 ppm [015,414,421,610]

NIOSH Criteria Document: None NFPA Hazard Rating: Health (H): 2

Flammability (F): 2 Reactivity (R): 0

H2: Materials hazardous to health, but areas may be entered freely with full-faced mask self-contained breathing apparatus which provides

eye protection (see NFPA for details).

F2: Materials which must be moderately heated before ignition will occur

(see NFPA for details).

R0: Materials which are normally stable even under fire exposure conditions and which are not reactive with water (see NFPA for details).

*OTHER TOXICITY DATA:

Skin and Eye Irritation Data: skn-rbt 495 mg open MLD eye-rbt 100 mg MLD

Review: Toxicology Review-2

Standards and Regulations: DOT-Hazard: ORM-A; Label: None

DOT-IMO: Flammable solid; Label: Flammable solid

Status: EPA Genetox Program 1988, Negative: Cell transform.-mouse embryo

EPA Genetox Program 1988, Negative: Cell transform.-RLV F344 rat

embryo

EPA Genetox Program 1988, Negative: Histidine reversion-Ames test

EPA TSCA Chemical Inventory, 1986

EPA TSCA Test Submission (TSCATS) Data Base, June 1988 NIOSH Analytical Methods: see Hydrocarbons, Aromatic, 1501; NIOSH Analytical Methods: see Polynuclear Aromatic Hydrocarbons

(HPLC), 5506; (GC), 5515

Meets criteria for proposed OSHA Medical Records Rule

IDLH value: 500 ppm [346,371] Fatal dose: 5-15 g [071]

Cumene: human TCLo inhalation 200ppm (200ppm) BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY)

BEHAVIORAL: ANTIPSYCHOTIC

BEHAVIORAL: IRRITABILITY "Handbook of Organic Industrial Solvents," 2nd ed., Chicago, National Assoc. of Mutual Casualty

Companies, 1961Vol. 2, Pg. 39, 1961.

mouse LC50 inhalation 10gm/m3/7H (10000mg/m3) LIVER: MULTIPLE EFFECTS

KIDNEY, URETER, AND BLADDER: CHANGES IN BOTH TUBULES AND GLOMERULI

BLOOD: CHANGES IN SPLEEN Journal of Industrial Hygiene and Toxicology. Vol. 26, Pg. 264, 1944.

mouse LD50 oral 12750mg/kg (12750mg/kg) Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 36(9), Pg. 18, 1971.

rabbit LD50 skin 12300uL/kg (12.3mL/kg) AMA Archives of Industrial Hygiene and Occupational Medicine. Vol. 4, Pg. 119,

rat LCLo inhalation 8000ppm/4H (8000ppm) AMA Archives of Industrial Hygiene and Occupational Medicine. Vol. 4, Pg. 119, 1951.

rat LD50 oral 1400mg/kg (1400mg/kg) GASTROINTESTINAL: GASTRITIS AMA Archives of Industrial Health. Vol. 14, Pg. 387, 1956.

XYLENES (MIXED): *TOXICITY:

typ. dose mode specie amount unit other

TCLo ihl hmn 200 ppm

LCLo ihl man 10000 ppm/6H

LD50 orl rat 4300 mg/kg

LC50 ihl rat 5000 ppm/4H

LD50 scu rat 1700 mg/kg

LD50 ipr mus 1548 mg/kg

LDLo ipr gpg 2000 mg/kg

LDLo ipr mam 2000 mg/kg

LCLo ihl gpg 450 ppm

LDLo orl hmn 50 mg/kg

*AQTX/TLM96: 100-10 ppm

*SAX TOXICITY EVALUATION:

THR = MODERATE via inhalation and oral routes.

*CARCINOGENICITY:

Review: IARC Cancer Review: Human Inadequate Evidence

IARC Cancer Review: Animal Inadequate Evidence

IARC: Not classifiable as a human carcinogen (Group 3) [610]

Status: NTP Carcinogenesis Studies (Gavage); No Evidence: Male and Female Rat,

Male and Female Mouse [620]

*MUTATION DATA:

test lowest dose | test lowest dose

cyt-smc 1 mmol/tube |

*TERATOGENICITY:

Reproductive Effects Data:

TCLo: ihl-rat 1000 mg/m3/24H (9-14D preg) TCLo: ihl-rat 50 mg/m3/6H (1-21D preg) TCLo: ihl-rat 600 mg/m3/24H (7-15D preg) TDLo: orl-mus 20600 ug/kg (6-15D preg) TCLo: ihl-mus 4000 ppm/6H (6-12D preg)

TDLo: orl-mus 31 mg/kg (6-15D preg)

TCLo: ihl-mus 2000 ppm/6H (6-12D preg)

*STANDARDS, REGULATIONS & RECOMMENDATIONS:

OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z

Transitional Limit: PEL-TWA 100 ppm [610]

Final Limit: PEL-TWA 100 ppm; STEL 150 ppm [610] ACGIH: TLV-TWA 100 ppm; STEL 150 ppm [610]

NIOSH Criteria Document: Recommended Exposure Limit to this compound-air:

TWA 100 ppm; Ceiling Limit 200 ppm/10M [015,610]

NFPA Hazard Rating: Health (H): 2

Flammability (F): 3 Reactivity (R): 0

H2: Materials hazardous to health, but areas may be entered freely with full-faced mask self-contained breathing apparatus which provides

eye protection (see NFPA for details).

F3: Materials which can be ignited under almost all normal temperature conditions (see NFPA for details).

RO: Materials which are normally stable even under fire exposure conditions and which are not reactive with water (see NFPA for details).

*OTHER TOXICITY DATA:

Skin and Eye Irritation Data:

eye-hmn 200 ppm

skn-rbt 100% MOD

skn-rbt 500 mg/24H MOD

eye-rbt 87 mg MLD

eye-rbt 5 mg/24H SEV

Standards and Regulations: DOT-Hazard: Flammable liquid; Label: Flammable

liguid

DOT-IMO: Flammable or Combustible liquid; Label:

Flammable liquid

Status: NIOSH Analytical Methods: see hydrocarbons, aromatic, 1501

EPA TSCA Chemical Inventory, 1986

EPA TSCA 8(a) Preliminary Assessment Information, Final Rule

EPA Genetox Program 1986, Negative: In vitro SCE-human lymphocytes;

In vitro SCE-human

EPA TSCA Test Submission (TSCATS) Data Base, December 1986

Meets criteria for proposed OSHA Medical Records Rule

SECTION 12: Ecological information

Toxicity

ENVIROMENTAL DATA: No known significant effects or critical hazards

ECOTOXICOLOGICAL INFORMATION: Not Available

Persistence and degradability

Hydrocarbon mineral oils, and non-petroleum oils, are inherently biodegradable and are not persistant. OECD 301 values range from 50% to 95% in 28 days.

Bioaccumulative potential

Hydrocarbon mineral oils, and non-petroleum oils, are inherently biodegradable and have low bioaccumulation potential. Specific information on components is shown below.

Mobility in soil

Mineral oils have been shown to adhere strongly to soil. Mobility is expected to be low.

Other adverse effects

None

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Dispose of accordance in local, and provincial regulations for solvent and oil materials

Packaging disposal

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Other disposal recommendations

Prevent the material from entering drains and water courses. Do not discharge directly to a water source. Advise Authorities if spillage has eterned watercourse or sewer or has contaminated soil or vegetation.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Canadian Domestic Substances List (DSL)

All components of this product are listed on the Canadian Domestic Substance List

Canadian Non-Domestic Substances List (NDSL)

SECTION 16: Other information

This Safety Data Sheet was prepared in good faith from the most recent information available. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use.

16.2 Preparation information

Prepared by Craig Gourley