SAFETY DATA SHEET



1. Identification

Product identifier Diesel Range Organics #1 - GRO/DRO

Other means of identification

M-TPH5X5

For Laboratory Use Only Recommended use

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Chem Service, Inc. 660 Tower Lane **Address**

West Chester, PA 19380

United States

Toll Free 800-452-9994 **Telephone** Direct

610-692-3026

Website www.chemservice.com E-mail info@chemservice.com

Chemtrec US 800-424-9300 **Emergency phone number**

Chemtrec outside US +1 703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Carcinogenicity Category 2 Specific target organ toxicity, repeated Category 2

exposure

Environmental hazards Not classified. **OSHA** defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing

cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face

protection.

If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If Response

> in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Specific treatment (see this label). Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash

before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information 1.4% of the mixture consists of component(s) of unknown acute oral toxicity.

Material name: Diesel Range Organics #1 - GRO/DRO 422 Version #: 01 Issue date: 08-16-2014

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methylene chloride	DICHLOROMETHANE; METHYLENE DICHLORIDE	75-09-2	98
n-Decane		124-18-5	0.2
n-Docosane		629-97-0	0.2
n-Dodecane		112-40-3	0.2
n-Eicosane		112-95-8	0.2
n-Hexacosane		630-01-3	0.2
n-Hexadecane		544-76-3	0.2
n-Octacosane		630-02-4	0.2
n-Octadecane		593-45-3	0.2
n-Tetracosane		646-31-1	0.2
n-Tetradecane		629-59-4	0.2

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off Skin contact

contaminated clothing and wash before reuse.

Eve contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion Most important Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May

cause redness and pain. Prolonged exposure may cause chronic effects. symptoms/effects, acute and

delayed

Provide general supportive measures and treat symptomatically. In case of shortness of breath, Indication of immediate give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. medical attention and special treatment needed

General information IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware

of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from During fire, gases hazardous to health may be formed. the chemical

Special protective equipment Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

and precautions for firefighters Fire-fighting Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted. General fire hazards

6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

equipment/instructions

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Туре	Value	
Methylene chloride (CAS 75-09-2)	STEL	125 ppm	
	TWA	25 ppm	
US. ACGIH Threshold Limit Values			
Components	Туре	Value	
Methylene chloride (CAS 75-09-2)	TWA	50 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Methylene chloride (CAS 75-09-2)	0.3 mg/l	Dichlorometha ne	Urine	*

^{* -} For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Thermal mazards wear appropriate thermal protective clothing, when necessary.

General hygieneConsiderations
When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely

wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Liquid
Color Not available.
Odor Not available.
Odor threshold Not available.
pH Not available.

Melting point/freezing point -139 °F (-95 °C) estimated

Initial boiling point and boiling

range

103.55 °F (39.75 °C) estimated

Flash point Not available. Not available **Evaporation rate** Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

15.5 % estimated

(%)

Flammability limit - upper

66.4 % estimated

Not available. Explosive limit - lower (%) Not available. Explosive limit - upper (%)

579.97 hPa estimated Vapor pressure

Vapor density Not available. Relative density Not available.

Solubility(ies)

Solubility (water) Not available. Partition coefficient Not available.

(n-octanol/water)

1033 °F (556.11 °C) estimated **Auto-ignition temperature**

Not available. **Decomposition temperature** Not available. **Viscosity**

Other information

Density 1.32077 g/cm3 estimated

Percent volatile 98 % estimated Specific gravity 1.32 estimated 98 % estimated VOC (Weight %)

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerization does not occur.

reactions

Contact with incompatible materials. Conditions to avoid

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion Harmful if swallowed.

Inhalation Prolonged inhalation may be harmful. May cause damage to organs by inhalation.

Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May

cause redness and pain.

Information on toxicological effects

Harmful if swallowed. Acute toxicity

Components **Species Test Results**

Methylene chloride (CAS 75-09-2)

Acute Dermal

LD50 Rat > 2000 mg/kg

Inhalation

LC50 Guinea pig 11600 ppm, 6 Hours

Material name: Diesel Range Organics #1 - GRO/DRO

SDS US 422 Version #: 01 Issue date: 08-16-2014

Components	Species	Test Results
		40.2 mg/l, 6 Hours
	Mouse	14400 ppm, 7 Hours
		51.5 mg/l, 2 Hours
		49.1 mg/l, 6 Hours
		49 mg/l, 7 Hours
	Rat	2000 mg/l, 15 Minutes
		88 mg/l, 900 Days
		79 mg/l, 2 Hours
		52 mg/l, 6 Hours
LD50	Mouse	16000 ppm, 7 Hours
Oral		
LD50	Rat	1600 mg/kg
Other		
LD50	Mouse	437 mg/kg
n-Decane (CAS 124-18-5)		
Acute		
Dermal	5 11 11	0.400
LD50	Rabbit	>= 3160 mg/kg
	Rat	> 2000 mg/kg
Inhalation	Monkov	>= 11160 mg/m2
LC50	Monkey	>= 11160 mg/m3
	Mouse	72.3 mg/l, 2 Hours
	Rat	> 5000 mg/m3, 8 Hours
		> 4951 mg/m3, 4 Hours
		> 41 ppm, 8 Hours
<i>Oral</i> LD50	Rat	> 5000 mg/kg
		> 5000 mg/kg
n-Dodecane (CAS 112-40-3) Acute)	
Dermal		
LD50	Rabbit	>= 3160 mg/kg
	Rat	> 2000 mg/kg
Inhalation		• •
LC50	Monkey	>= 11160 mg/m3
	Rat	> 5000 mg/m3, 8 Hours
		> 4951 mg/m3, 4 Hours
		> 41 ppm, 8 Hours
Oral		
LD50	Rat	> 5000 mg/kg
n-Tetradecane (CAS 629-59	-4)	
Acute		
Dermal	-	
LD50	Rabbit	>= 3160 mg/kg
	Rat	> 2000 mg/kg
Inhalation	Mod	
LC50	Monkey	>= 11160 mg/m3
	Rat	> 5000 mg/m3, 8 Hours
		> 4951 mg/m3, 4 Hours
		> 41 ppm, 8 Hours

Components **Species Test Results**

Oral

LD50 Rat > 5000 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eve damage/eve

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer. IARC Monographs. Overall Evaluation of Carcinogenicity

> Methylene chloride (CAS 75-09-2) 2B Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Methylene chloride (CAS 75-09-2) Reasonably Anticipated to be a Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Methylene chloride (CAS 75-09-2)

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. May cause

damage to organs through prolonged or repeated exposure.

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components **Species Test Results** Methylene chloride (CAS 75-09-2) Aquatic Crustacea EC50 Water flea (Daphnia magna) 1250 mg/l, 48 hours Fish LC50 Fathead minnow (Pimephales promelas) 140.8 - 277.8 mg/l, 96 hours n-Decane (CAS 124-18-5) Aquatic Fish LC50 Sheepshead minnow (Cyprinodon > 500 mg/l, 96 hours variegatus) n-Docosane (CAS 629-97-0) Aquatic Fish LC50 Sheepshead minnow (Cyprinodon > 500 mg/l, 96 hours variegatus)

Persistence and degradability No data is available on the degradability of this product.

No data available. Bioaccumulative potential Partition coefficient n-octanol / water (log Kow)

1.25 Methylene chloride 5.01 n-Decane n-Hexadecane 8.25 n-Tetradecane 7.2

No data available. Mobility in soil

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

^{*} Estimates for product may be based on additional component data not shown.

^{*} Estimates for product may be based on additional component data not shown.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. This material

and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

US RCRA Hazardous Waste U List: Reference

Methylene chloride (CAS 75-09-2)

U080

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

UN number UN1593

UN proper shipping name

Dichloromethane, solution

Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk -Label(s) 6.1 Packing group III

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions IB3, IP8, N36, T7, TP2

Packaging exceptions 153
Packaging non bulk 203
Packaging bulk 241

IATA

UN number UN1593

UN proper shipping name

Transport hazard class(es)

Dichloromethane solution

Class 6.1(PGIII)
Subsidiary risk king group III

Packing group III
Environmental hazards No.
ERG Code 6L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed.

Cargo aircraft only Allowed.

IMDG

UN number UN1593

UN proper shipping name

ing name DICHLOROMETHANE SOLUTION

Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk Packing group |||
Environmental hazards

Marina nallutant

Marine pollutant No. nS F-A, S-A

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not available.

the IBC Code



IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Methylene chloride (CAS 75-09-2)

Listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Methylene chloride (CAS 75-09-2)

Cancer

Heart

Central nervous system

Liver

Skin irritation Eye irritation

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
Methylene chloride	75-09-2	98	

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Methylene chloride (CAS 75-09-2)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Methylene chloride (CAS 75-09-2)

US. New Jersey Worker and Community Right-to-Know Act

Methylene chloride (CAS 75-09-2) 500 LBS

US. Pennsylvania RTK - Hazardous Substances

Methylene chloride (CAS 75-09-2) n-Decane (CAS 124-18-5)

US. Rhode Island RTK

Methylene chloride (CAS 75-09-2)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Inventory name

Methylene chloride (CAS 75-09-2) Listed: April 1, 1988

International Inventories

Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

(PICCS)

Issue date 08-16-2014

Version # 01

NFPA ratings Health: 2

Flammability: 1 Instability: 0

Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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This product is furnished FOR LABORATORY USE ONLY.

422 Version #: 01 Issue date: 08-16-2014

On inventory (yes/no)*

Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).