

**1. Product and Company Identification**

**Product Code:** C19, C20  
**Product Name:** Motor Flush  
**Company Name:** CYCLO INDUSTRIES, INC.  
902 SOUTH US HIGHWAY 1  
JUPITER, FL 33477  
**Phone Number:** (800)843-7813

**Web site address:** www.cyclo.com  
**Email address:** ehs@cyclo.com

**Emergency Contact:** First Aid Emergency (800)752-7869  
CHEMTREC (703) 527-3887 (800)424-9300  
**Information:** First Aid Emergency (Outside U.S.) (312)906-6194

**Intended Use:** Motor Flush

**2. Hazards Identification**

**Flammable Liquids, Category 4**  
**Aspiration Toxicity, Category 1**  
**Skin Corrosion/Irritation, Category 2**  
**Serious Eye Damage/Eye Irritation, Category 2**  
**Acute Toxicity: Inhalation, Category 4**  
**Specific Target Organ Toxicity (single exposure), Category 3**  
**Carcinogenicity, Category 2**  
**Specific Target Organ Toxicity (repeated exposure), Category 2**



**GHS Signal Word:** **Danger**

**GHS Hazard Phrases:** H227: Combustible liquid.  
H304: May be fatal if swallowed and enters airways.  
H315: Causes skin irritation.  
H320: Causes eye irritation.  
H332: Harmful if inhaled.  
H335: May cause respiratory irritation.  
H351: Suspected of causing cancer.  
H402: Harmful to aquatic life.

**GHS Precaution Phrases:** P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P210: Keep away from heat/sparks/open flames/hot surfaces - No smoking.  
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.  
P263: Wash contaminated clothing before reuse.  
P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P271: Use only outdoors or in a well-ventilated area.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

**GHS Response Phrases:** P370+378: In case of fire, use foam, alcohol foam, carbon dioxide, dry chemical or water fog for extinction.  
P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position



# SAFETY DATA SHEET

## Motor Flush

comfortable for breathing.

P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

### GHS Storage and Disposal Phrases:

P403+P233+P235: Keep in a cool/well ventilated space. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

## 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
8052-41-3	Stoddard solvent	85.0 -100.0 %
95-63-6	1,2,4-Trimethylbenzene	2.5 -10.0 %
1330-20-7	Xylene (mixed isomers)	1.0 -2.5 %
NA	Mineral Oil Mixture	1.0 -2.5 %
98-82-8	Cumene	0.1 -1.0 %
100-41-4	Ethylbenzene	0.1 -1.0 %
91-20-3	Naphthalene	0.1 -1.0 %

## 4. First Aid Measures

### Emergency and First Aid Procedures:

If swallowed, do not induce vomiting. Rinse mouth. If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. In case of skin contact, remove contaminated clothing and launder before reuse. Wash with soap and water for 15 minutes. Call physician immediately if adverse reaction occurs.

## 5. Fire Fighting Measures

**Flash Pt:** 65.00 C (149.0 F) Method Used: Pensky-Marten Closed Cup

**Explosive Limits:** LEL: No data. UEL: No data.

**Autoignition Pt:** No data.

**Suitable Extinguishing Media:** Dry chemical, water fog, CO2 or foam.

**Fire Fighting Instructions:** Use NIOSH/MSHA approved positive pressure self-contained breathing apparatus when any material is involved in a fire.

**Flammable Properties and Hazards:** Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and spray from as far a distance as possible. Avoid excessive water spray application. Keep surrounding area cool with water spray from a distance and prevent further ignition of combustible material. Keep run-off out of sewers and water sources.

This product has been determined to be a combustible liquid per the OSHA Hazard Communication Standard and should be handled accordingly. For additional fire related information, see NFPA 30 or the North American Emergency Response Guide 128.

**Hazardous Combustion Products:** No data available.



**6. Accidental Release Measures**

**Steps To Be Taken In Case Material Is Released Or Spilled:**

Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition sources. Advise authorities and National Response Center if substance has entered a watercourse or sewer. Notify local health and pollution control agencies, if appropriate. Contain liquid with sand or soil. Recover and return free product to proper containers. Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids.

**7. Handling and Storage**

**Precautions To Be Taken in Handling:**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces - No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Keep out of the reach of children.

**Precautions To Be Taken in Storing:**

Store locked up. Keep in a cool/well ventilated space. Keep container tightly closed.

**8. Exposure Controls/Personal Protection**

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
8052-41-3	Stoddard solvent	PEL: 500 ppm	TLV: 100 ppm	No data.
95-63-6	1,2,4-Trimethylbenzene	No data.	No data.	No data.
1330-20-7	Xylene (mixed isomers)	PEL: 100 ppm	TLV: 100 ppm STEL: 150 ppm	No data.
NA	Mineral Oil Mixture	No data.	No data.	No data.
98-82-8	Cumene	PEL: 50 ppm	TLV: 50 ppm	No data.
100-41-4	Ethylbenzene	PEL: 100 ppm	TLV: 20 ppm STEL: 125 ppm	No data.
91-20-3	Naphthalene	PEL: 10 ppm	TLV: 10 ppm STEL: 15 ppm	No data.

**Respiratory Equipment (Specify Type):**

Use approved organic vapor chemical cartridge or supplied air respirators when material produces vapors that exceed permissible limits or excessive vapors are generated. Observe respirator protection factor criteria cited in ANSI Z88.2. Self-contained breathing apparatus should be used for fire fighting.

**Eye Protection:**

No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields.

**Protective Gloves:**

Neoprene, nitrile, polyvinyl alcohol (PVA), polyvinyl chloride and polyurethane gloves to prevent skin contact.

**Other Protective Clothing:**

No data available.

**Engineering Controls (Ventilation etc.):**

Local or general exhaust required when using at elevated temperatures that generate vapors or mists.

**Work/Hygienic/Maintenance Practices:**

No special protective clothing is normally required. Select protective clothing depending on industrial operations. Use Mechanical ventilation equipment that is explosion-proof.



## 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas [ X ] Liquid [ ] Solid
<b>Appearance and Odor:</b>	Clear, red liquid with petroleum odor.
<b>pH:</b>	No data.
<b>Melting Point:</b>	No data.
<b>Boiling Point:</b>	360.00 F (182.2 C) - 550.00 F (287.8 C)
<b>Flash Pt:</b>	65.00 C (149.0 F) Method Used: Pensky-Marten Closed Cup
<b>Evaporation Rate:</b>	No data.
<b>Flammability (solid, gas):</b>	No data available.
<b>Explosive Limits:</b>	LEL: No data. UEL: No data.
<b>Vapor Pressure (vs. Air or mm Hg):</b>	No data.
<b>Vapor Density (vs. Air = 1):</b>	No data.
<b>Specific Gravity (Water = 1):</b>	.727 - .859
<b>Density:</b>	6.06 - 7.16 LB/GA at 70.0 F (21.1 C)
<b>Solubility in Water:</b>	Negligible
<b>Octanol/Water Partition Coefficient:</b>	No data.
<b>Percent Volatile:</b>	10.0 % by weight.
<b>Autoignition Pt:</b>	No data.
<b>Decomposition Temperature:</b>	No data.
<b>Viscosity:</b>	No data.

## 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ ] Stable [ X ]
<b>Conditions To Avoid - Instability:</b>	This material is stable at 70 F, 760 mm pressure.
<b>Incompatibility - Materials To Avoid:</b>	Strong oxidizers such as nitrates, perchlorates, chlorine, fluorine.
<b>Hazardous Decomposition or Byproducts:</b>	Combustion produces carbon monoxide, aldehydes, aromatic and other hydrocarbons.
<b>Possibility of Hazardous Reactions:</b>	Will occur [ ] Will not occur [ X ]
<b>Conditions To Avoid - Hazardous Reactions:</b>	No data available.



**11. Toxicological Information**

**Toxicological Information:** Lifetime skin painting studies in animals with similar distillate fuels have produced weak to moderate carcinogenic activity following prolonged and repeated exposure. Similar middle distillates, when tested at nonirritating dose levels, did not show any significant carcinogenic activity indicating that this tumorigenic response is likely related to chronic irritation and not to dose. Repeated dermal application has produced severe irritation and systemic toxicity in subacute toxicity studies. Some components of this product, have been shown to produce a species specific, sex hormonal dependent kidney lesion in male rats from repeated oral or inhalation exposure. Subsequent research has shown that the kidney damage develops via the formation of a alpha-2u-globulin, a mechanism unique to the male rat. Humans do not form alpha-2u-globulin, therefore, the kidney effects resulting from this mechanism are not relevant in humans. Some components of this product were found to be positive in a few mutagenicity tests while negative in the majority of others. The exact relationship between these results and human health is not known.

Summary of health effect data on distillate fuel components:

This products sub-components may contain >.01% naphthalene. Exposure to naphthalene at 30 pm for two years caused lung tumors in female mice. Male mice with the same exposure did not develop tumors. Exposure to 10-60 ppm naphthalene for 2 years caused tumors in the tissue lining of the nose and respiratory tract in male and female rats. Oral administration of 133-267 mg/kg/day of naphthalene in mice for up to 90 days did not produce mortality, systemic toxicity, adversely affect organ or body weight or produce changes in blood. Repeated oral administration of naphthalene produced an anemia in dogs. Repeated intraperitoneal doses of naphthalene produced lung damage in mice. Repeated high doses of naphthalene has caused the formation of cataracts and retinotoxicity in the eyes of rats and rabbits due to accumulation of 1,2-naphthoquinone, a toxic metabolite. Effects in human eyes is uncertain and not well documented. Pregnant rats administered intraperitoneal doses of naphthalene during gestation gave birth to offspring that had delayed heart and bone development. Pregnant mice given near lethal doses of naphthalene showed no significant maternal toxicity and a reduction in the number of pups per litter, but no gross abnormalities in offspring. Suppressed spermiogenesis and progeny development have been reported in mice, rats and guinea pigs after exposure to high concentrations of naphthalene in their drinking water. Certain groups or individuals, i.e., infants, Semites, Arabs, Asians and Blacks, with a certain blood enzyme deficiency (glucose-6-phosphate dehydrogenase) are particularly susceptible to hemolytic agents and can rapidly develop hemolytic anemia and systemic poisoning from ingestion or inhalation of naphthalene.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
-------	--------------------------------------	-----	------	-------	------



# SAFETY DATA SHEET

## Motor Flush

Revision: 09/21/2017  
Supersedes Revision: 08/25/2016

8052-41-3	Stoddard solvent	n.a.	n.a.	n.a.	n.a.
95-63-6	1,2,4-Trimethylbenzene	n.a.	n.a.	n.a.	n.a.
1330-20-7	Xylene (mixed isomers)	n.a.	3	A4	n.a.
NA	Mineral Oil Mixture	n.a.	n.a.	n.a.	n.a.
98-82-8	Cumene	Possible	2B	n.a.	n.a.
100-41-4	Ethylbenzene	n.a.	2B	A3	n.a.
91-20-3	Naphthalene	Possible	2B	A4	n.a.

### 12. Ecological Information

#### General Ecological Information:

Product can cause fouling of shoreline and may be harmful to aquatic life in low concentrations. The 96 hour LL50 values for an accommodated fraction (WAF) of fuel oil ranged from 3.2 to 65 mg/l in fish and 2-210 mg/l in invertebrates. EL 50 values for inhibition of algal growth ranged from 1.8 to 2.9 mg/l for No. 2 fuel oil and from 10 to 78 mg/l for diesel fuel. This product does not concentrate or accumulate in the food chain. If released to soil and water, this product is expected to biodegrade under both aerobic and anaerobic conditions.

Environmental Hazards: TOXIC TO AQUATIC ORGANISMS. MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

Environmental Fate: THIS PRODUCT CONTAINS COMPONENTS WHICH MAY BE PERSISTENT IN THE ENVIRONMENT.

### 13. Disposal Considerations

**Waste Disposal Method:** Dispose of contents/container in accordance with local/regional/national/international regulation.

### 14. Transport Information

#### LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** Not-Regulated  
**DOT Hazard Class:**  
**UN/NA Number:**

#### LAND TRANSPORT (European ADR/RID):

**ADR/RID Shipping Name:** Not-Regulated  
**UN Number:**  
**Hazard Class:**

#### MARINE TRANSPORT (IMDG/IMO):

**IMDG/IMO Shipping Name:** Not-Regulated

#### AIR TRANSPORT (ICAO/IATA):

**ICAO/IATA Shipping Name:** Not-Regulated

### 15. Regulatory Information

#### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
8052-41-3	Stoddard solvent	No	No	No
95-63-6	1,2,4-Trimethylbenzene	No	No	Yes
1330-20-7	Xylene (mixed isomers)	No	Yes 100 LB	Yes
NA	Mineral Oil Mixture	No	No	No
98-82-8	Cumene	No	Yes 5000 LB	Yes



# SAFETY DATA SHEET

## Motor Flush

Revision: 09/21/2017

Supersedes Revision: 08/25/2016

100-41-4		No	Yes 1000 LB	Yes
91-20-3	Naphthalene	No	Yes 100 LB	Yes

### CAS # Hazardous Components (Chemical Name)

### Other US EPA or State Lists

8052-41-3	Stoddard solvent	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: Yes - 1; SC TAP: No; WI Air: Yes		
95-63-6	1,2,4-Trimethylbenzene	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC; MA Oil/HazMat: Yes; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - 2716; NY Part 597: No; PA HSL: Yes - E; SC TAP: No; WI Air: No		
1330-20-7	Xylene (mixed isomers)	CAA HAP,ODC: HAP; CWA NPDES: Yes; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: CMR, Part 5; NC TAP: Yes; NJ EHS: Yes - 2014; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: Yes; WI Air: Yes		
NA	Mineral Oil Mixture	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No		
98-82-8	Cumene	CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: Yes: Canc.; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NC TAP: Yes; NJ EHS: Yes - 0542; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: Yes; WI Air: Yes		
100-41-4	Ethylbenzene	CAA HAP,ODC: HAP; CWA NPDES: Yes; TSCA: Yes - Inventory; CA PROP.65: Yes: Canc.; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NC TAP: Yes; NJ EHS: Yes - 0851; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: Yes; WI Air: Yes		
91-20-3	Naphthalene	CAA HAP,ODC: HAP; CWA NPDES: Yes; TSCA: Yes - Inventory, 8A PAIR; CA PROP.65: Yes: Canc.; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NC TAP: Yes; NJ EHS: Yes - 1322; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: Yes; WI Air: Yes		

### CAS # Hazardous Components (Chemical Name)

### International Regulatory Lists

8052-41-3	Stoddard solvent	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes		
95-63-6	1,2,4-Trimethylbenzene	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes		
1330-20-7	Xylene (mixed isomers)	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes		
NA	Mineral Oil Mixture	Canadian DSL: No; Canadian NDSL: No; Taiwan TCSCA: No		
98-82-8	Cumene	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: 081-01 (4)		
100-41-4	Ethylbenzene	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: 116-01 (4)		
91-20-3	Naphthalene	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes		



## 16. Other Information

**Revision Date:** 09/21/2017

**Additional Information About** No data available.

**This Product:**

**Company Policy or**

**Disclaimer:**

Cyclo Industries, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. Cyclo Industries, Inc. makes no representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose with respect to the information set forth herein or to the product to which the information refers. Accordingly, Cyclo Industries, Inc. will not be responsible for damages resulting from use of or reliance upon this information.