



MASTER DOT 5 BRAKE FLUID 12 FL.OZ.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 09/10/2014

Version:

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : MASTER DOT 5 BRAKE FLUID 12 FL.OZ.
Product code : DS-12

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Silicone Brake Fluid

1.3. Details of the supplier of the safety data sheet

Master Chemical
4635 Willow Drive
Medina, MN 55340 - USA
T: 612-478-2360

1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Acute Tox. 4 (Oral) H302
Skin Irrit. 2 H315
Eye Irrit. 2B H320
Carc. 2 H351

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

GHS08

Signal word (GHS-US)

: Warning

Hazard statements (GHS-US)

: H302 - Harmful if swallowed
H315 - Causes skin irritation
H320 - Causes eye irritation
H351 - Suspected of causing cancer

Precautionary statements (GHS-US)

: P201 - Obtain special instructions
P202 - Do not handle until all safety precautions have been read and understood
P264 - Wash affected areas thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves, protective clothing, eye protection, face protection
P301+P312 - If swallowed: Call a poison center/doctor/... if you feel unwell
P302+P352 - If on skin: Wash with plenty of soap and water
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
P321 - Specific treatment: See section 4.1 on this label
P330 - Rinse mouth
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P405 - Store locked up
P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS-US)

No data available

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Polydimethylsiloxane	(CAS No) 63148-62-9	< 95	Not classified
bis(2-ethylhexyl) sebacate	(CAS No) 122-62-3	3 - 7	Not classified
tributyl phosphate	(CAS No) 126-73-8	1 - 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Carc. 2, H351

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Suspected of causing cancer.
First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Coughing. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources.
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6.1.1. For non-emergency personnel

Protective equipment	: Gloves. Safety glasses.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Dam up the liquid spill.
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions . Do not handle until all safety precautions have been read and understood.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Comply with applicable regulations.
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls	: Local exhaust ventilation, vent hoods.
Personal protective equipment	: Avoid all unnecessary exposure. Gloves. Safety glasses.



Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Color	: Violet.
Odor	: Mild.
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: ≈ 206 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 0.97
Solubility	: Insoluble in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 45 cSt
Viscosity, dynamic	: No data available

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Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

Polydimethylsiloxane (63148-62-9)	
LD50 oral rat	> 15400 mg/kg body weight (Rat; Literature study)
LD50 dermal rabbit	> 2000 mg/kg body weight (Rabbit; Literature study)

bis(2-ethylhexyl) sebacate (122-62-3)	
LD50 oral rat	> 2000 mg/kg (Rat)

tributyl phosphate (126-73-8)	
LD50 oral rat	1552 mg/kg (Rat; Other; Experimental value)
LD50 dermal rabbit	> 3100 mg/kg (Rabbit; Experimental value; Other)
LC50 inhalation rat (mg/l)	> 4242 mg/l/4h (Rat; Experimental value)

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/injuries after inhalation	: Coughing. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

Polydimethylsiloxane (63148-62-9)	
LC50 fish 1	350 mg/l (96 h; Pleuronectes platessa)

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bis(2-ethylhexyl) sebacate (122-62-3)	
LC50 fish 1	> mg/l >10/100,Pisces; Estimated value

tributyl phosphate (126-73-8)	
LC50 fish 1	4.5 mg/l (96 h; Oryzias latipes; Nominal concentration)
EC50 Daphnia 1	68 mg/l (24 h; Daphnia pulex)
EC50 other aquatic organisms 1	20 mg/l (24 h; Protozoa)
LC50 fish 2	4.2 - 11.8 mg/l (96 h; Oncorhynchus mykiss)
EC50 Daphnia 2	3.65 mg/l (48 h; Daphnia magna)
Threshold limit other aquatic organisms 1	14 mg/l (Protozoa; Toxicity test)
Threshold limit algae 1	3.2 mg/l (168 h; Scenedesmus quadricauda; Toxicity test)
Threshold limit algae 2	2.8 mg/l (72 h; Desmodesmus subspicatus; Nominal concentration)

12.2. Persistence and degradability

MASTER DOT 5 BRAKE FLUID 12 FL.OZ.	
Persistence and degradability	Not established.

Polydimethylsiloxane (63148-62-9)	
Persistence and degradability	Biodegradability in water: no data available. Forming sediments in water. Biodegradable in the soil. No (test)data on mobility of the substance available.

bis(2-ethylhexyl) sebacate (122-62-3)	
Persistence and degradability	Readily biodegradable in water.

tributyl phosphate (126-73-8)	
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the substance available.

12.3. Bioaccumulative potential

MASTER DOT 5 BRAKE FLUID 12 FL.OZ.	
Bioaccumulative potential	Not established.

Polydimethylsiloxane (63148-62-9)	
Bioaccumulative potential	Not bioaccumulative.

bis(2-ethylhexyl) sebacate (122-62-3)	
Bioaccumulative potential	No bioaccumulation data available.

tributyl phosphate (126-73-8)	
BCF fish 1	5.5 - 20 (6 weeks; Cyprinus carpio; Fresh weight)
BCF fish 2	11 - 49 (Oryzias latipes)
Log Pow	4.0 (Experimental value; US EPA)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Polydimethylsiloxane (63148-62-9)	
Ecology - soil	Not toxic to plants.

tributyl phosphate (126-73-8)	
Surface tension	0.029 N/m (20 °C)

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Ecology - waste materials : Avoid release to the environment.

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SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): Not Regulated,
ICAO/IATA (air): Not Regulated,
IMO/IMDG (water): Not Regulated,

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not Regulated

14.3. Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

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Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Immediate (acute) health hazard
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15.2. International regulations

CANADA

MASTER DOT 5 BRAKE FLUID 12 FL.OZ.

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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EU-Regulations

MASTER DOT 5 BRAKE FLUID 12 FL.OZ.

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.3; R40

Full text of R-phrases: see section 16

15.2.2. National regulations

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Listed on KECI (Korean Existing Chemicals Inventory)
Listed on AICS (Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)

15.3. US State regulations

No additional information available

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Carc. 2	Carcinogenicity Category 2

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Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H302	Harmful if swallowed
H315	Causes skin irritation
H320	Causes eye irritation
H351	Suspected of causing cancer

NFPA health hazard

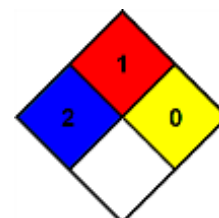
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 1 Slight Hazard

Physical

: 0 Minimal Hazard

Personal Protection

: B

SDS US (GHS HazCom 2012)

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

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