



Material Safety Data Sheet

MP HD Heavy Duty Metal Protector - Aerosol

Date : 06/15/2013
Version : 4

Section 1. Product and company identification

Product name

MP HD Heavy Duty Metal Protector - Aerosol

Material uses

Rust Preventative and Lubricating Fluid.

Supplier/Manufacturer

AMSOIL INC.
925 Tower Avenue
Superior, WI 54880

Code

AMHSC

MSDS authored by

AMSOIL INC.

In case of emergency

CHEMTREC, U.S. : 1-800-424-9300
International: +1-703-527-3887

Section 2. Hazards identification

Emergency overview

- Color** : Brown.
- Physical state** : Liquid. [Fluid Spray.]
- Odor** : Mild hydrocarbon.
- Signal word** : WARNING!
- Hazard statements** : EXTREMELY FLAMMABLE. CONTENTS UNDER PRESSURE. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
- Precautions** : Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
- OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
- Routes of entry** : Dermal contact. Eye contact. Inhalation. Ingestion.
- Potential acute health effects**
- Inhalation** : Irritating to respiratory system.
- Ingestion** : Aspiration hazard if swallowed. Can enter lungs and cause damage.
- Skin** : Irritating to skin. Can cause dermatitis.
- Eyes** : Irritating to eyes.
- Potential chronic health effects**
- Chronic effects** : Contains material that can cause target organ damage.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.

- Fertility effects** : No known significant effects or critical hazards.
- Target organs** : Contains material which may cause damage to the following organs: blood, kidneys, the nervous system, liver, heart, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, testes.

Over-exposure signs/symptoms

- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
- Skin** : Adverse symptoms may include the following:
irritation
redness
- Eyes** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Medical conditions aggravated by overexposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

Section 3. Composition/information on ingredients

United States

Name	CAS number	%
Propane	74-98-6	10 - 30
Stoddart solvent	8052-41-3	10 - 30
Distillates (petroleum), hydrotreated light	64742-47-8	10 - 30
Butane	106-97-8	10 - 30
Acetone	67-64-1	10 - 30
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	1 - 5

Canada

Name	CAS number	%
Propane	74-98-6	10 - 30
Stoddart solvent	8052-41-3	10 - 30
Distillates (petroleum), hydrotreated light	64742-47-8	10 - 30
Butane	106-97-8	10 - 30
Acetone	67-64-1	10 - 30
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention if symptoms occur.
- Inhalation** : Move exposed person to fresh air. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5. Fire-fighting measures

- Flammability of the product** : Extremely flammable. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.
- Extinguishing media**
- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet or water-based fire extinguishers.
- Special exposure hazards** : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions** : In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.
- Large spill** : Immediately contact emergency personnel. Stop leak if without risk. Prevent entry into sewers, water courses, basements or confined areas. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Avoid contact with used product. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Empty containers retain product residue and can be hazardous. Keep away from heat, sparks and flame. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

United States

Ingredient	Exposure limits
Propane	<p>ACGIH TLV (United States, 3/2012). TWA: 1000 ppm 8 hours.</p> <p>NIOSH REL (United States, 6/2009). TWA: 1800 mg/m³ 10 hours. TWA: 1000 ppm 10 hours.</p> <p>OSHA PEL (United States, 6/2010). TWA: 1800 mg/m³ 8 hours. TWA: 1000 ppm 8 hours.</p>
Stoddart solvent	<p>ACGIH TLV (United States, 3/2012). TWA: 525 mg/m³ 8 hours. TWA: 100 ppm 8 hours.</p> <p>NIOSH REL (United States, 6/2009). CEIL: 1800 mg/m³ 15 minutes. TWA: 350 mg/m³ 10 hours.</p> <p>OSHA PEL (United States, 6/2010). TWA: 2900 mg/m³ 8 hours. TWA: 500 ppm 8 hours.</p>

Distillates (petroleum), hydrotreated light	<p>ACGIH TLV (United States, 3/2012). Absorbed through skin. TWA: 200 mg/m³, (as total hydrocarbon vapour) 8 hours. ACGIH TLV (United States, 1/2011). TWA: 1000 ppm 8 hours. NIOSH REL (United States, 6/2009). TWA: 1900 mg/m³ 10 hours. TWA: 800 ppm 10 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 800 ppm 8 hours. TWA: 1900 mg/m³ 8 hours.</p>
Butane	
Acetone	
Distillates (petroleum), hydrotreated heavy naphthenic	<p>ACGIH TLV (United States, 3/2012). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 6/2009). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 6/2010). TWA: 1000 ppm 8 hours.</p>

Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			Notations
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	
Propane	US ACGIH 3/2012	1000	-	-	-	-	-	-	-	-	
	AB 4/2009	1000	-	-	-	-	-	-	-	-	
	BC 4/2012	1000	-	-	-	-	-	-	-	-	
	ON 7/2010	1000	-	-	-	-	-	-	-	-	
	QC 9/2011	1000	1800	-	-	-	-	-	-	-	
Stoddart solvent	US ACGIH 3/2012	100	525	-	-	-	-	-	-	-	
	AB 4/2009	100	572	-	-	-	-	-	-	-	
	BC 4/2012	-	290	-	-	580	-	-	-	-	
	ON 7/2010	100	525	-	-	-	-	-	-	-	
	QC 9/2011	100	525	-	-	-	-	-	-	-	
Butane	US ACGIH 1/2011	1000	-	-	-	-	-	-	-	-	
	AB 4/2009	1000	-	-	-	-	-	-	-	-	
	BC 9/2011	600	-	-	750	-	-	-	-	-	
	ON 7/2010	800	-	-	-	-	-	-	-	-	
	QC 9/2011	800	1900	-	-	-	-	-	-	-	
Acetone	US ACGIH 3/2012	500	1188	-	750	1782	-	-	-	-	
	AB 4/2009	500	1200	-	750	1800	-	-	-	-	
	BC 4/2012	250	-	-	500	-	-	-	-	-	
	ON 7/2010	500	1188	-	750	1782	-	-	-	-	
	QC 9/2011	500	1190	-	1000	2380	-	-	-	-	
Distillates (petroleum), hydrotreated light, as total hydrocarbon vapour	US ACGIH 3/2012	-	200	-	-	-	-	-	-	-	[1]
	AB 4/2009	-	200	-	-	-	-	-	-	-	[1]
	BC 4/2012	-	200	-	-	-	-	-	-	-	[1]
Distillates (petroleum), hydrotreated light	ON 7/2010	-	200	-	-	-	-	-	-	-	[1]
Distillates (petroleum), hydrotreated heavy naphthenic	US ACGIH 3/2012	-	5	-	-	-	-	-	-	-	[a]

	AB 4/2009	-	5	-	-	10	-	-	-	-	[b]
	ON 7/2010	-	5	-	-	10	-	-	-	-	[b]
	QC 9/2011	-	5	-	-	10	-	-	-	-	[b]

[1] Absorbed through skin.

Form: [a] Inhalable fraction [b] Mist

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Use explosion-proof ventilation equipment.
- Hygiene measures** : Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
- Respiratory** : Not required under normal conditions of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Ensure a MSHA/NIOSH-approved respirator or equivalent is used.
- Hands** : Use gloves appropriate for work or task being performed. Recommended: Natural rubber (latex).
- Eyes** : Safety eyewear should be used when there is a likelihood of exposure. Recommended: Safety glasses with side shields.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. No special protective clothing is required. Recommended: Coveralls.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Section 9. Physical and chemical properties

Physical state	: Liquid. [Fluid Spray.]	Odor	: Mild hydrocarbon.
Color	: Brown.	pH	: Not available.
Flash point	: Closed cup: -104.44°C (-156°F) [Pensky-Martens.]	Auto-ignition temperature	: Not available.
Flammable limits	: Lower: 0.7% Upper: 13%	Melting point/ Pour point	: Not available.
Boiling point	: -42.222 to 260°C (-44 to 500°F)	Vapor pressure	: Not available.
Relative density	: 0.7	Vapor density	: >1 [Air = 1]
Volatility	: Not available.	Evaporation rate	: <1 (ether (anhydrous) = 1)
Viscosity	: Not available.	Solubility	: Insoluble

Section 10. Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Butane	LC50 Inhalation Vapor	Rat	658000 mg/m ³	4 hours
Acetone	LD50 Oral	Rat	5800 mg/kg	-
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Chronic toxicity

There is no data available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Stoddart solvent	Eyes - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Human	-	100 ppm	-
Acetone	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Human	-	186300 ppm	-
	Eyes - Mild irritant	Rabbit	-	10 µL	-
Distillates (petroleum), hydrotreated heavy naphthenic	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	395 mg	-
	Skin - Severe irritant	Rabbit	-	500 mg	-

Sensitizer

Skin : There is no data available.

Respiratory : There is no data available.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Acetone	A4	-	-	-	-	-

Mutagenicity

There is no data available.

Teratogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Section 12. Ecological information

Ecotoxicity : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Acetone	Acute EC50 20,565 mg/L Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
Distillates (petroleum), hydrotreated light	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 100000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 4.95 mg/L Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days

Persistence/degradability

There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations







Waste disposal : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Do not puncture or incinerate container. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

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

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

North America

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1950	Aerosols, flammable (each not exceeding 1 L capacity)	2.1	-		-
TDG Classification	UN1950	Aerosols, flammable (each not exceeding 1 L capacity)	2.1	-		-
IMDG Class	UN1950	Aerosols, flammable (each not exceeding 1 L capacity). Marine pollutant (Stoddart solvent)	2.1	-	 	Emergency schedules (EmS) F-D, S-U
IATA-DGR Class	UN1950	Aerosols, flammable (each not exceeding 1 L capacity)	2.1	-	 	-

PG* : Packing group

Exemption to the above classification may apply.

AERG : 126

Section 15. Regulatory information

United States

HCS Classification : Flammable aerosol
Irritating material
Target organ effects

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.
SARA 302/304: No products were found.
SARA 311/312 Hazards identification: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Air Act (CAA) 112 regulated flammable substances: Propane; Butane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Listed

State regulations

Massachusetts : The following components are listed: Propane; Stoddart solvent; Butane; Acetone

New York : The following components are listed: Acetone

New Jersey : The following components are listed: Propane; Stoddart solvent; Butane; Acetone; Distillates (petroleum), hydrotreated heavy naphthenic

Pennsylvania : The following components are listed: Propane; Stoddart solvent; Butane; Acetone

California Prop. 65

No products were found.

Canada

WHMIS (Canada) : Class A: Compressed gas.
Class B-5: Flammable aerosol.
Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

Canadian NPRI : The following components are listed: Propane; Stoddart solvent; Distillates (petroleum), hydrotreated light; Butane; Acetone

CEPA Toxic substances : The following components are listed: Acetone

Canada inventory : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16. Other information

United States

Label requirements : EXTREMELY FLAMMABLE. CONTENTS UNDER PRESSURE. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

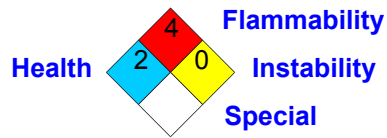
Hazardous Material Information System (U.S.A.) :

Health	*	2
Flammability		4
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



Date of issue : 06/15/2013
Date of previous issue : 08/15/2012
Version : 4

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.