



SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Revision date: Jan/23/2019

Version: 2

Language: en-US

Date of print: Apr/12/2019

Metal-Fluid-Spray

Material number 115800

Page:

1 of 11

1. Product and company identification

Product identifier

Trade name: Metal-Fluid-Spray

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

General use: Technical aerosol.
Reserved for industrial and professional use.

Details of the supplier of the safety data sheet

Company name: WEICON Inc.
Street/POB-No.: 20 Steckle Place, Unit 20
Postal Code, city: Kitchener, Ontario N2E 2C3, CA
WWW: www.weicon.ca
E-mail: info@weicon.ca
Telephone: +1-519-896-5252
Telefax: +1-519-896-5254
Dept. responsible for information:
Product-Safety-Department
Telephone: +49(0)251 / 9322 - 0, Email: msds@weicon.de

Emergency phone number

EMERGENCY CONTACT – USA (24h): Tel: +1 202 464 2554

Transport:

TRANSPORT EMERGENCY CONTACT - USA (24h): Tel: +1 202 464 2554

2. Hazards identification

Emergency overview

Appearance: Form: Aerosol
Color: colorless
Odor: characteristic
Classification: Flammable Aerosol - Category 1; Compressed Gas; Sensitization - skin - Category 1;
Aquatic toxicity - chronic - Category 3;

Hazard symbols:



Signal word:

Danger

Hazard statements:

Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
May cause an allergic skin reaction.
Harmful to aquatic life with long lasting effects.



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Revision date: Jan/23/2019

Version: 2

Language: en-US

Date of print: Apr/12/2019

Metal-Fluid-Spray

Material number 115800

Page:

2 of 11

Precautionary statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not spray on an open flame or other ignition source.
Do not pierce or burn, even after use.
Avoid breathing spray.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection.
IF ON SKIN: Wash with plenty of water/soap.
Specific treatment (see ' First aid ' on this label).
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
Protect from sunlight. Store in a well-ventilated place.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Dispose of contents/container in accordance with local/regional/national/international regulation.

Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

Potentially explosive mixtures may form if adequate ventilation is not provided.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may lead to a narcotic effect.
see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Preparation of active ingredients with propellant



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Revision date: Jan/23/2019

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Language: en-US

Date of print: Apr/12/2019

Metal-Fluid-Spray

Material number 115800

Page:

3 of 11

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 8042-47-5	Mineral oil	10 - 25 %	Aspiration Toxicity - Category 1.
CAS 64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	3 - 10 %	Flammable Liquid - Category 2. Skin Irritation - Category 2. Specific Target Organ Toxicity (Single Exposure) - Category 3. Aspiration Toxicity - Category 1. Aquatic toxicity - chronic - Category 2.
CAS 7786-30-3	Magnesium chloride	< 5 %	not applicable
CAS 10377-60-3	Magnesium nitrate	< 5 %	not applicable
CAS 26172-55-4	5-Chloro-2-methyl-2H-isothiazol-3-one	< 1 %	Acute Toxicity - oral - Category 3. Acute Toxicity - dermal - Category 3. Acute Toxicity - inhalative - Category 3. Skin Corrosion - Category 1B. Sensitization - skin - Category 1. Aquatic toxicity - acute - Category 1. Aquatic toxicity - chronic - Category 1.
CAS 2682-20-4	2-Methyl-2H-isothiazol-3-one	< 1 %	Acute Toxicity - oral - Category 3. Acute Toxicity - dermal - Category 3. Acute Toxicity - inhalative - Category 2. Skin Corrosion - Category 1B. Eye Damage - Category 1. Sensitization - skin - Category 1. Specific Target Organ Toxicity (Single Exposure) - Category 3. Aquatic toxicity - acute - Category 1.
CAS 5989-27-5	(R)-p-Mentha-1,8-diene	< 1 %	Flammable Liquid - Category 3. Skin Irritation - Category 2. Sensitization - skin - Category 1. Aquatic toxicity - acute - Category 1. Aquatic toxicity - chronic - Category 1.
CAS 106-97-8	n-Butane, pure	10 - 25 %	Flammable Gas - Category 1. Compressed Gas.
CAS 74-98-6	Propane	3 - 10 %	Flammable Gas - Category 1. Compressed Gas.

Additional information: < 5% nonionic surfactant
< 5% perfumes (D-Limonene)
15 - 30% aliphatic hydrocarbons

4. First aid measures

General information: IF exposed or concerned: Get medical advice/attention. First aider: Pay attention to self-protection! Take off immediately all contaminated clothing and wash it before reuse.

In case of inhalation: Move victim to fresh air, put at rest and loosen restrictive clothing. Seek medical attention.

Following skin contact: Immediately clean with water and soap followed by thorough rinsing. Seek medical attention. Take off immediately all contaminated clothing and wash it before reuse.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.



SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Revision date: Jan/23/2019

Version: 2

Language: en-US

Date of print: Apr/12/2019

Metal-Fluid-Spray

Material number 115800

Page:

4 of 11

After swallowing: Immediately get medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

May cause an allergic skin reaction. Inhaling can lead to irritations of the respiratory tract and mucous membrane.

Higher doses may lead to a narcotic effect.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

not applicable (Aerosol)

Auto-ignition temperature: not self-igniting

Suitable extinguishing media:

Alcohol resistant foam, dry chemical powder, carbon dioxide, water mist, sand.

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

May form dangerous gases and vapours in case of fire. Furthermore, there may develop: carbon monoxide and carbon dioxide.

Potentially explosive vapor/air mixtures may form.

Protective equipment and precautions for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Heating will lead to pressure increase: Danger of bursting and explosion. Cool exposed containers with water spray.

Move undamaged containers from immediate hazard area if it can be done safely.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Do not allow fire water to penetrate into surface or ground water.

Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

6. Accidental release measures

Personal precautions:

Do not breathe spray. Avoid contact with the substance.

Eliminate all ignition sources if safe to do so. Provide adequate ventilation.

Wear appropriate protective equipment. Keep unprotected people away.

Cordon off downwind area at risk and warn inhabitants.

Take off immediately all contaminated clothing and wash it before reuse. Do not spray into eyes or onto the skin.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains.

In case of release, notify competent authorities. Danger of explosion!



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in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Revision date: Jan/23/2019

Version: 2

Language: en-US

Date of print: Apr/12/2019

Metal-Fluid-Spray

Material number 115800

Page:

5 of 11

Methods for clean-up: Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

Beware of re-ignition. Thoroughly clean surrounding area.

Additional information: Use explosion-proof equipment and non-sparking tools/utensils.

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe spray. Avoid contact with skin and eyes. Wear appropriate protective equipment. Keep unprotected people away.

Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation. Take off immediately all contaminated clothing and wash it before reuse.

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.

Storage

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.

Keep container dry. Keep only in the original container.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Store containers in upright position.

Hints on joint storage:

Do not store together with combustible or self-igniting materials or any highly flammable solids.

Keep away from food, drink and animal feedingstuffs.

keep away from: acids, strong oxidizing agents

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
106-97-8	n-Butane, pure	USA: ACGIH: TWA USA: NIOSH: TWA	1000 ppm 1900 mg/m ³ ; 800 ppm
74-98-6	Propane	USA: NIOSH: TWA USA: OSHA: TWA	1800 mg/m ³ ; 1000 ppm 1800 mg/m ³ ; 1000 ppm

Engineering controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment. Use only explosion-proof equipment.

See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.



SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Revision date: Jan/23/2019

Version: 2

Language: en-US

Date of print: Apr/12/2019

Metal-Fluid-Spray

Material number 115800

Page:

6 of 11

Skin protection	Flame retardant, antistatic and chemical resistant protective clothing. Protective gloves according to OSHA Standard - 29 CFR: 1910.138 (Solvent resistant protective gloves). Glove material: Nitrile rubber - Layer thickness: 0.4 mm Breakthrough time: 60 min. Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Respiratory protection:	Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
General hygiene considerations:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not breathe spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Form: Aerosol Color: colorless
Odor:	characteristic
Odor threshold:	No data available
pH value:	not determined
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	not applicable (Aerosol)
Evaporation rate:	No data available
Flammability:	Extremely flammable aerosol.
Explosion limits:	LEL (Lower Explosion Limit): 0.80 Vol-% UEL (Upper Explosive Limit): 10.90 Vol-%
Vapor pressure:	at 68 °F: 2100 hPa
Vapor density:	No data available
Density:	No data available
Water solubility:	at 68 °F: slightly miscible
Partition coefficient: n-octanol/water:	not applicable
Auto-ignition temperature:	not self-igniting
Thermal decomposition:	No data available
Explosive properties:	Vapors may form explosive mixtures with air. Contains gas under pressure; may explode if heated.
Ignition temperature:	> 392 °F



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Revision date: Jan/23/2019

Version: 2

Language: en-US

Date of print: Apr/12/2019

Metal-Fluid-Spray

Material number 115800

Page: 7 of 11

Solvent content: 22.5 %
Water content: 58 %

10. Stability and reactivity

Reactivity: Extremely flammable aerosol. Vapors may form explosive mixtures with air.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions
Contains gas under pressure; may explode if heated.

Conditions to avoid: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Incompatible materials: Strong oxidizing agents, acids

Hazardous decomposition products:
No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available

11. Toxicological information

Toxicological tests

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Minor irritation effect - does not require labeling.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Minor irritation effect - does not require labeling.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Sensitization - skin - Category 1 = May cause an allergic skin reaction.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Based on available data, the classification criteria are not met.



SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Revision date: Jan/23/2019

Version: 2

Language: en-US

Date of print: Apr/12/2019

Metal-Fluid-Spray

Material number 115800

Page: 8 of 11

Other information: Information about Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:
LD50 Rat, oral: > 5840 mg/kg
LD50 Rabbit, dermal: 2920 mg/kg
LD50 Rat, inhalative: > 25 mg/L
For carcinogenic effects:
Information about (R)-p-Mentha-1,8-diene:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed

Symptoms

After contact with skin:
Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

General remarks

Further hazardous properties cannot be excluded.

12. Ecological information

Ecotoxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.
Information about Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:
Acute (short-term) fish toxicity:
- LL50 Oncorhynchus mykiss: 11.4 mg/L/96h (OECD 203)
Chronic (long-term) fish toxicity:
- NOELR Oncorhynchus mykiss: 1,534 mg/L/28d (QSAR)
Acute Daphnia toxicity:
- EL50 Daphnia magna (Big water flea): 3 mg/L/48h (OECD 202)
Chronic daphnia toxicity:
- NOEC Daphnia magna (Big water flea): 0.17 mg/L/21d (OECD 211)
Algae toxicity:
- EL50 Pseudokirchneriella subcapitata (green algae), 10 - 30 mg/L/72h (OECD 201)
- NOELR Pseudokirchneriella subcapitata (green algae) 3 mg/L/72h (OECD 201)

Further details: Information about Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics:
Biodegradation: 98 %/28d (OECD 301 F).
Product is readily biodegradable.

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

Volatile organic compounds (VOC):

< 43 % by weight

General information: Do not allow to enter into ground-water, surface water or drains.



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Date of print: Apr/12/2019

Metal-Fluid-Spray

Material number 115800

Page:

9 of 11

13. Disposal considerations

Product

Recommendation: Do not pierce or burn, even after use.
Special waste. Dispose of waste according to applicable legislation.
Do not dispose of with household waste.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.
Empty carefully and completely, if possible. Handle empty containers with care.
Incineration may cause explosion.

14. Transport information

USA: Department of Transportation (DOT)

Identification number: UN1950
Proper shipping name: UN 1950, AEROSOLS
Hazard class or Division: 2.1
Labels: 2.1
Special provisions: N82
Packaging – Exceptions: 306
Packaging – Non-bulk: None
Packaging – Bulk: None
Quantity limitations – Passenger aircraft / rail:
75 kg
Quantity limitations – Cargo only: 150 kg
Vessel stowage – Location: A
Vessel stowage – Other: 25, 87, 126



Sea transport (IMDG)

UN number: UN 1950
Proper shipping name: UN 1950, AEROSOLS
Class or division, Subsidiary risk: Class 2.1, Subrisk -
Packing Group: -
EmS: F-D, S-U
Special provisions: 63, 190, 277, 327, 344, 381, 959
Limited quantities: 1000 mL
Excepted quantities: E0
Contaminated packaging - Instructions: P207, LP200
Contaminated packaging - Provisions: PP87, L2
IBC - Instructions: -
IBC - Provisions: -
Tank instructions - IMO: -
Tank instructions - UN: -
Tank instructions - Provisions: -
Stowage and handling: SW1 SW22
Segregation: SG69
Properties and observations: -
Marine pollutant: no
Segregation group: none



SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Revision date: Jan/23/2019

Version: 2

Language: en-US

Date of print: Apr/12/2019

Metal-Fluid-Spray

Material number 115800

Page: 10 of 11

Air transport (IATA)

UN/ID number: UN 1950
Proper shipping name: UN 1950, AEROSOLS, flammable
Class or division, Subsidiary risk: Class 2.1
Hazard label: Flamm. gas
Excepted Quantity Code: E0
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y203 - Max. Net Qty/Pkg. 30 kg G
Passenger and Cargo Aircraft: Pack.Instr. 203 - Max. Net Qty/Pkg. 75 kg
Cargo Aircraft only: Pack.Instr. 203 - Max. Net Qty/Pkg. 150 kg
Special provisions: A145 A167 A802
Emergency Response Guide-Code (ERG): 10L

15. Regulatory information

National regulations - U.S. Federal Regulations

Mineral oil: TSCA Inventory: listed; UVCB
TSCA HPVC: not listed

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics: TSCA Inventory: listed
TSCA HPVC: not listed

Magnesium chloride: TSCA: listed

Magnesium nitrate: TSCA Inventory: listed
TSCA HPVC: not listed

5-Chloro-2-methyl-2H-isothiazol-3-one: TSCA Inventory: listed; EPA flags P; S
TSCA HPVC: not listed

2-Methyl-2H-isothiazol-3-one: TSCA Inventory: listed; EPA flags P; S
TSCA HPVC: not listed

(R)-p-Mentha-1,8-diene: TSCA Inventory: listed
TSCA HPVC: not listed
Carcinogen Status:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed
Other Environmental Laws:
Marine Pollutant: listed as pollutant.

n-Butane, pure: TSCA Inventory: listed
TSCA HPVC: not listed
Clean Air Act:
Accidental Release Prevention: Threshold 10000 lbs.
/ Basis for listing = f
NIOSH Recommendations:
Occupational Health Guideline: 0068*

Propane: TSCA Inventory: listed
TSCA HPVC: not listed
Clean Air Act:
Accidental Release Prevention: Threshold 10000 lbs.
/ Basis for listing = f
NIOSH Recommendations:
Occupational Health Guideline: 0524



SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Metal-Fluid-Spray

Material number 115800

Revision date: Jan/23/2019

Version: 2

Language: en-US

Date of print: Apr/12/2019

Page: 11 of 11

National regulations - U.S. State Regulations

California Proposition 65: Not listed.

National regulations - Great Britain

Hazchem-Code: -

16. Other information

Text for labeling:

Contains 10 - 25 % Mineral oil, 3 - 10 % Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics, < 5 % Magnesium chloride, < 5 % Magnesium nitrate, < 1 % 5-Chloro-2-methyl-2H-isothiazol-3-one, < 1 % 2-Methyl-2H-isothiazol-3-one, < 1 % (R)-p-Mentha-1,8-diene, 10 - 25 % n-Butane, pure, 3 - 10 % Propane. Safety data sheet available on request.

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 4 (Severe)

Reactivity: 1 (Slight)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 4 (Severe)

Physical Hazard: 1 (Slight)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	4
PHYSICAL HAZARD	1
	X

Reason of change:

IATA-DGR 2019

Date of first version:

Jan/18/2018

Department issuing data sheet

Contact person:

see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.