SAFETY DATA SHEET

AUTOTECH EMISSION INJECTOR AEROSOL

Infosafe No.: 1JB9X ISSUED Date: 18/01/2018 ISSUED by: MotorOne Group Pty Ltd

1. IDENTIFICATION

GHS Product Identifier

AUTOTECH EMISSION INJECTOR AEROSOL

Company Name

MotorOne Group Pty Ltd

Address

275 Canterbury Road Canterbury VIC 3126 Australia

Telephone/Fax Number

Tel: (03) 8809 2700 Fax: (03) 9888 6944

Recommended use of the chemical and restrictions on use

Automotive fuel injector cleaner (aerosol spray).

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Aspiration Hazard: Category 1
Carcinogenicity category 1A
Eye Damage/Irritation: Category 2A
Flammable Aerosol: Category 1
Germ cell mutagenicity category 1B
Skin Corrosion/Irritation: Category 2
STOT Repeated Exposure: Category 2
STOT Single Exposure: Category 3 (narcotic)
Toxic to Reproduction: Category 1A

Signal Word (s)

DANGER

Hazard Statement (s)

H222 Extremely flammable aerosol.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H340 May cause genetic defects.

H350 May cause cancer.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

Pictogram (s)

Health hazard, Exclamation mark, Flame



Precautionary statement - Prevention

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.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash contaminated skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement - Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P331 Do NOT induce vomiting.

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.

Precautionary statement - Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Precautionary statement - Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Toluene	108-88-3	30-<60 %
Light gasoline	8006-61-9	30-<60 %
Isopropanol	67-63-0	10-<30 %
Compressed air (propellant)		1-<20 %
Mineral oil		1-<10 %
Benzene	71-43-2	0.1-<3 %
N-Methyl-2-pyrrolidone	872-50-4	0-<1 %
Ingredients determined not to be hazardous		Balance

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Unlikely due to form of product. If ingestion occurs, do not induce vomiting. Wash out mouth and lips with water. Where vomiting occurs naturally have affected person place head below hip level in order to reduce risk of aspiration. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide, dry chemical, foam, water fog or water mist.

Unsuitable Extinguishing Media

Water jet

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including oxides of nitrogen, carbon monoxide and carbon dioxide.

Specific Hazards Arising From The Chemical

Contents under pressure - cans can explode in a fire. This product is extremely flammable. Keep containers and fire-exposed surfaces cool with water spray. Shut off any leak if safe to do so and remove sources of re-ignition. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Extinguish or remove all sources of ignition and stop leak if safe to do so. Wear appropriate personal protective equipment and clothing to prevent exposure. Evacuate all unprotected personnel. Water spray or fog may be used to disperse/absorb vapour if any. Place inert, Non combustible absorbent material onto spillage. If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely. Collect residues and seal in labelled drums for disposal. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations. Dispose of waste according to applicable local and national regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

EXTREMELY FLAMMABLE. Wear appropriate personal protective equipment and clothing to prevent exposure. Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. DO NOT store or use in confined spaces. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Build up of mists or vapours in the atmosphere must be prevented. Do not spray on a naked flame or any incandescent material. Do NOT puncture, burn, cut or heat containers as they may contain hazardous residues. Do not smoke. Flameproof equipment is necessary in areas where the product is being used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

Avoid exposure. Do not handle until all safety precautions have been read and understood. It is recommended that pregnant or breastfeeding women should not handle this product unless adequate exposure protection can be assured at all times. Female personnel planning pregnancy should be made aware of the potential risks.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area away from sources of ignition, oxidising agents, foodstuffs, clothing and out of direct sunlight. Do not expose can to temperatures exceeding 50°C. Protect containers against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Do NOT pressurise, cut or heat aerosol containers. Content is under pressure and can explode violently. Ensure that storage conditions comply with applicable local and national regulations. For information on the design of the storeroom, reference should be made to Australian Standard AS 2278.1(2008) Non-refillable metal aerosol dispensers of capacity 50 mL to 1000 mL inclusive.

Storage Temperatures

< 50°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Benzene

TWA: 1 ppm, 3.2 mg/m³

Isopropanol

TWA: 400 ppm, 983 mg/m³ STEL: 500 ppm, 1230 mg/m³

Oil mist, refined mineral

TWA: 5 mg/m³

Toluene

TWA: 50 ppm, 191 mg/m³ STEL: 150 ppm, 574 mg/m³

NOTE: Sk

N-Methyl-2-pyrrolidone TWA: 25 ppm, 103 mg/m³ STEL: 75 ppm, 309 mg/m³

NOTE: Sk

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eighthour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Sk' Notice: Absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Source: Safe Work Australia

Biological Limit Values

Name: Toluene

Determinant: toluene in urine

Value: 0.03mg/l

Sampling time: end of shift

Name: Toluene

Determinant: toluene in blood

Value: 0.02mg/l

Sampling time: prior to last shift of workweek

Name: Toluene

Determinant: o-Cresol in urine Value: 0.3mg/g creatinine Sampling time: end of shift

Notation: B

Name: Isopropanol

Determinant: acetone in urine

Value: 40 mg/l

Sampling time: end of shift at end of work week

Notation: B, Ns

Name: Benzene

Determinant: S-phenylmercapturic acid in urine

Value: 25 microg/g creatinine Sampling time: end of shift

Notation: B

Name: Benzene

Determinant: tt-muconic acid in urine Value: 500 microg/g creatinine Sampling time: end of shift

Notation: B

N-Methyl-2-pyrrolidone

Determinant: 5-hydroxy-N-Methyl-2-pyrrolidone in urine

Value: 100 mg/l

Sampling time: end of shift

Source: American Conference of Industrial Hygienists (ACGIH)

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715 (2009), Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716 (2012), Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eve Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 2 & 6 (2012) - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1 (2016): Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective work wear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Aerosol - Liquid	Appearance	Light purple-coloured liquid in an aerosol pressure pack.
Colour	Light purple	Odour	Characteristic petroleum naphtha odour.
Decomposition Temperature	Not available	Melting Point	Not available
Boiling Point	Not available	Solubility in Water	Insoluble
Specific Gravity	Not available	рН	Not available
Vapour Pressure	>1	Vapour Density (Air=1)	<1 (n-Butyl acetate=1)
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Partition Coefficient: n-octanol/water	Not available
Flash Point	<-40°C (Closed cup) (for gasoline)	Flammability	Extremely flammable aerosol
Auto-Ignition Temperature	Not available	Flammable Limits - Lower	1.0% (for gasoline)
Flammable Limits - Upper	8.0% (for gasoline)		

10. STABILITY AND REACTIVITY

Reactivity

Reacts with incompatible materials.

Chemical Stability

Stable under normal conditions of storage and handling.

Conditions to Avoid

Heat, direct sunlight, flames and other sources of ignition.

Incompatible materials

Oxidising agents, strong acids and strong bases.

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes, smoke and gases including: carbon dioxide and carbon monoxide.

Possibility of hazardous reactions

Closed containers may rupture when exposed to heat greater than 50°C.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No toxicity data available for this material. The available acute toxicity data for the ingredients are given below.

Acute Toxicity - Oral

Isopropanol:

LD50 (rat): 5,045 mg/kg

Toluene:

LD50 (rat): 5000-7530 mg/kg

Acute Toxicity - Inhalation

Toluene:

LC50 (Rat): 49 g/m³/4h LC50 (Mouse): 400 ppm/24h

Isopropanol:

LC50 (Rat): 16,000 ppm/8h

Acute Toxicity - Dermal

Isopropanol:

LD50 (Rabbit): 12,800 mg/kg

Ingestion

Unlikely due to form of product. If ingestion occurs, may cause lung damage if swallowed. Subsequent to ingestion or vomiting, small amounts of liquid aspirated into the respiratory system may cause severe pulmonary injury that may lead to death. May also cause irritation to the gastrointestinal system. Symptoms may include nausea, vomiting, diarrhoea and abdominal pain.

Inhalation

Inhalation of product vapours may be irritating to the respiratory system. Vapours may cause drowsiness and dizziness. Inhalation exposure may cause susceptible individuals to show change in heart beat rhythm ie, cardiac arrhythmia. Acute effects from inhalation of high concentrations of solvent vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterised by headache and dizziness; and increased reaction time, fatigue and loss of coordination. If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.

WARNING: Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.

Skin

Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eve

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

The vapour is irritating to the eyes. The liquid is highly irritating and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.

Respiratory sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

May cause genetic defects. Classified as Known or presumed to induce heritable mutations.

Carcinogenicity

May cause cancer. Classified as a Known or presumed human carcinogen.

Benzene is listed as a Group 1: Carcinogenic to humans according to International Agency for Research on Cancer (IARC).

Light gasoline is listed as a Group 2B: Possibly carcinogenic to humans according to International Agency for Research on Cancer (IARC).

Toluene and isopropanol are listed as Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

May damage fertility or the unborn child. Classified as a Known or presumed human reproductive or developmental toxicant.

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard

May be fatal if swallowed and enters airways.

Other Information

Chronic solvent inhalation exposures may result in nervous system impairment and liver blood changes. Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No ecological data available for this material.

Persistence and degradability

Not available

Mobility

Not available

Bioaccumulative Potential

Not available

Other Adverse Effects

Not available

Environmental Protection

Do not discharge this material into waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Dispose of waste according to applicable local and national regulations. Do not pierce, burn, cut, puncture or weld on or near containers. Empty containers may contain hazardous residues. Empty the container completely before disposal. Contaminated containers must not be treated as household waste. Advise flammable nature.

14. TRANSPORT INFORMATION

Transport Information

Road and Rail Transport (ADG Code):

This material is classified as Dangerous Goods Division 2.1 Flammable Gases

Division 2.1 Dangerous Goods are incompatible in a placard load with any of the following:

- Class 1: Explosives
- Division 2.2 Non-flammable, Non toxic gas that have a subsidiary risk 5.1 except when all are packed in cylinders or pressure drums not exceeding 500L capacity.
- Class 3: Flammable Liquids, if both the Division 2.1 and Class 3 dangerous goods are in tanks or other receptacles with a capacity individually exceeding 500L.
- Division 4.1: Flammable Solids
- Division 4.2: Spontaneously combustible substances
- Division 4.3: Dangerous when wet substances
- Division 5.1: Oxidising substances
- Division 5.2: Organic peroxides
- Class 7: Radioactive materials unless specifically exempted

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 2 UN No: 1950

Proper Shipping Name: AEROSOLS

EMS: F-D,S-U

Special Provisions: 63, 190, 277, 327, 344, 381, 959

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Class/Division: 2.1 UN No: 1950

Proper Shipping Name: Aerosols, flammable Packaging Instructions (passenger & cargo): 203

Packaging Instructions (cargo only): 203

Hazard Label: Flammable Gas Special Provisions: A145, A167, A802

U.N. Number

1950

UN proper shipping name

AEROSOLS

Transport hazard class(es)

2.1

IERG Number

49

IMDG Marine pollutant

No

Transport in Bulk

Not available

Special Precautions for User

Not available

15. REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a Scheduled 7 Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Schedule 7 Poisons should be available only to specialised or authorised users. Special regulations restricting their availability, possession, storage or use may apply.

Poisons Schedule

S7

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS reviewed: January 2018 Supersedes: December 2012

References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants, Safe work Australia.

American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of classification and labelling of chemicals.

Contact Person/Point

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END OF SDS

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