SAFETY DATA SHEET.

Issuing date 11-Nov-2015 **Revision Date** 02-Dec-2019 **Version** 1.01

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product name MS-1026 BATTERY CLEANER/DETEC

Recommended use of the chemical and restrictions on use

Product code F00136

Product Type Non-flammable aerosol
Synonyms None

Supplier's details

Recommended Use Battery Cleaner.

Uses advised against **No information available**

Manufactured For:
Mark Supply, Inc.
P.O. Box 1451
Venice, FL 34285
1-941-485-8199

Manufacturer
American Jetway Corporation
34136 Myrtle Street
Wayne, MI 48184-0126
Phone:(734) 721-5930 AMERICAN JETWAY 1-734-721-5930

Emergency telephone number
Chemical Emergency Phone Number CHEMTREC : 1-800-424-9300
Company Emergency Phone Number (941) 485-8199

2. HAZARDS IDENTIFICATION

Classification

Gases under pressure	Compressed Gas

GHS Label elements, including precautionary statements

Emergency Overview

Warning

Hazard Statements

Contains gas under pressure; may explode if heated

Appearance Clear **Physical state** Aerosol **Odor** Mild

Precautionary Statements - Storage
Protect from sunlight. Store in a well-ventilated place

Hazards not otherwise classified (HNOC)

None

Other information

0% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	10-20
TRIETHANOLAMINE	102-71-6	1-10
ETHYLENE GLYCOL	107-21-1	<0.01
DIETHANOLAMINE	111-42-2	<0.001
ETHYLENE OXIDE	75-21-8	<0.0001
1,4-DIOXANE	123-91-1	<0.0001

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mist, or gas. No hazards which require special first aid measures.

Eye contact Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. If eye irritation persists, consult a doctor.

Skin contact Wash off with soap and plenty of water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.

Inhalation Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.

Ingestion Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

Protection of First-aiders Remove all sources of ignition.

Most important symptoms/effects, acute and delayed

Main Symptoms Excessive exposure to the product may result in eye, skin, or respiratory irritation. Under normal conditions of intended use, this product does not pose a risk to health.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Water fog.Dry chemical. Foam.Carbon dioxide (CO2). Cool containers/tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire. Keep away from sources of ignition - No smoking.

Specific hazards arising from the chemical
Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray.

Hazardous Combustion Products Acrid smoke/fumes. Carbon oxides , Hydrocarbons, Fumes. Sulfur oxides.

Explosion Data
Sensitivity to Mechanical Impact none.
Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use with adequate ventiliation to keep the exposure levels below the OELS. Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions

Environmental precautions Vapors can accumulate in low areas. Report spills as required by local and federal regulations. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Methods for cleaning up Soak up with inert absorbent material. Contain liquid and collect with an inter, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly . After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Contents under pressure. Do not puncture or incinerate cans. Handle in accordance with good industrial hygiene and safety practice. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

Incompatible products Strong acids, alkalis, oxidizing agents.

Aerosol Level 1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	74-98-6: TWA: 1000 ppm 106-97-8: STEL: 1000 ppm 75-28-5: STEL: 1000 ppm	74-98-6:TWA: 1000 ppm TWA: 1800 mg/m³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m³ 106-97-8: (vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m³	74-98-6:IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m³ 106-97-8:TWA: 800 ppm TWA: 1900 mg/m³ 75-28-5:TWA: 800 ppm TWA: 1900 mg/m³
TRIETHANOLAMINE 102-71-6	TWA: 5 mg/m³	-	-
2-BUTOXYETHANOL 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m³
ETHYLENE GLYCOL 107-21-1	STEL: 50 ppm vapor fraction STEL: 10 mg/m³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m³	-
DIETHANOLAMINE 111-42-2	TWA: 1 mg/m³ inhalable fraction and vapor Skin - potential significant contribution to overall exposure by the cutaneous route	(vacated) TWA: 3 ppm (vacated) TWA: 15 mg/m³	TWA: 3 ppm TWA: 15 mg/m³
1,4-DIOXANE 123-91-1	TWA: 20 ppm Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 100 ppm TWA: 360 mg/m³ (vacated) TWA: 25 ppm (vacated) TWA: 90 mg/m³	IDLH: 500 ppm Ceiling: 1 ppm 30 min Ceiling: 3.6 mg/m³ 30 min

		(vacated) S* S*	
ETHYLENE OXIDE 75-21-8	TWA: 1 ppm	TWA: 1 ppm STEL: 5 ppm see 29 CFR 1910.1047	IDLH: 800 ppm Ceiling: 5 ppm 10 min/day Ceiling: 9 mg/m³ 10 min/day TWA: 0.1 ppm less than stated value TWA: 0.18 mg/m³ less than stated value

ACGIH: (American Conference of Governmental Industrial Hygienists)
OSHA: (Occupational Safety & Health Administration)
NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits. Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields. Tightly fitting safety goggles.

Skin and body protection Chemical resistant apron. Protective gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Aerosol		
Appearance	Clear	**Odor**	Mild
Color	Amber	**Odor Threshold**	

Property	**Values**	**Remarks • Methods**
pH	9	+/- 0.5
Melting/freezing point	No information available	
Boiling point/boiling range		
Flash Point	-91 °C / -132 °F	Based on propellant
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit		
lower flammability limit		
Vapor pressure		
Vapor density		
Specific Gravity	0.990	
Water solubility	Miscible with water	Miscible
Partition coefficient: n-octanol/water		
Autoignition temperature	No information available	Not applicable
Decomposition temperature		
Viscosity	No information available	
Explosive properties		

Other information

VOC Content(%) 13.23

10. STABILITY AND REACTIVITY

Reactivity
Stable under recommended storage conditions

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Extremes of temperature and direct sunlight.

Incompatible Materials
Strong acids, alkalis, oxidizing agents.

Hazardous Decomposition Products
Carbon oxides , Hydrocarbons, Fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Respiratory irritation may occur if excessive exposure to product by inhalation.

Eye contact Eye irritation may occur if excessive exposure to product occurs.

Skin contact Skin irritation may occur if person excessively exposes product to the skin.

Ingestion May be harmful if swallowed.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
TRIETHANOLAMINE 102-71-6	= 4190 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	-
ETHYLENE GLYCOL 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat)	-
DIETHANOLAMINE 111-42-2	= 780 mg/kg (Rat)	= 11.9 mL/kg (Rabbit)	-
ETHYLENE OXIDE 75-21-8	= 72 mg/kg (Rat)	-	= 800 ppm (Rat) 4 h
1,4-DIOXANE 123-91-1	= 5170 mg/kg (Rat)	= 7600 mg/kg (Rabbit)	= 46 mg/L (Rat) 2 h

Information on toxicological effects

Symptoms Excessive exposure to the product may result in eye, skin, or respiratory irritation. Under normal conditions of intended use, this product does not pose a risk to health.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Not a known sensitizer.
Germ cell mutagenicity Not a germ cell mutagen.
Carcinogenicity The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
TRIETHANOLAMINE 102-71-6	-	3	-	-
DIETHANOLAMINE 111-42-2	-	Group 2B	-	-
ETHYLENE OXIDE 75-21-8	A2	Group 1	Known	X
1,4-DIOXANE 123-91-1	A3	Group 2B	Reasonably Anticipated	X

ACGIH: (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC: (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
NTP: (National Toxicity Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA: (Occupational Safety & Health Administration)
X - Present

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
Specific target organ systemic toxicity (single exposure) No known effect based on information supplied.
Specific target organ systemic toxicity (repeated exposure) No known effect based on information supplied.
Chronic toxicity Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.
Target Organ Effects No known effects under normal use conditions.
Neurological effects Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document .
ATEmix (oral) 36176 mg/kg
ATEmix (dermal) 89955 mg/kg
ATEmix (inhalation-dust/mist) 284.3 mg/l
ATEmix (inhalation-vapor) 293.3 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
TRIETHANOLAMINE 102-71-6	216 mg/L EC50 Desmodesmus subspicatus 72h 169 mg/L EC50 Desmodesmus subspicatus 96h	10600 - 13000 mg/L LC50 Pimephales promelas 96h flow-through 1000 mg/L LC50 Pimephales promelas 96h static 450 - 1000 mg/L LC50 Lepomis macrochirus 96h static	-	-
ETHYLENE GLYCOL 107-21-1	6500 - 13000 mg/L EC50 Pseudokirchneriella subcapitata 96h	41000 mg/L LC50 Oncorhynchus mykiss 96h 14 - 18 mL/L LC50 Oncorhynchus mykiss 96h static 27540 mg/L LC50 Lepomis macrochirus 96h static 40761 mg/L LC50 Oncorhynchus mykiss 96h static 40000 - 60000 mg/L LC50 Pimephales promelas 96h static 16000 mg/L LC50 Poecilia reticulata 96h static	-	46300 mg/L EC50 Daphnia magna 48h

DIETHANOLAMINE 111-42-2	7.8 mg/L EC50 Desmodesmus subspicatus 72h 2.1 - 2.3 mg/L EC50 Pseudokirchneriella subcapitata 96h	4460 - 4980 mg/L LC50 Pimephales promelas 96h flow-through 1200 - 1580 mg/L LC50 Pimephales promelas 96h static 600 - 1000 mg/L LC50 Lepomis macrochirus 96h static	-	55 mg/L EC50 Daphnia magna 48h
ETHYLENE OXIDE 75-21-8	-	73 - 96 mg/L LC50 Pimephales promelas 96h	-	137 - 300 mg/L LC50 Daphnia magna 48h
1,4-DIOXANE 123-91-1	-	10000 mg/L LC50 Lepomis macrochirus 96h static 10000 mg/L LC50 Lepomis macrochirus 96h semi-static 9850 mg/L LC50 Pimephales promelas 96h flow-through 10306 - 14742 mg/L LC50 Pimephales promelas 96h static 9850 mg/L LC50 Pimephales promelas 96h	-	163 mg/L EC50 water flea 48h Static

Persistence and degradability

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Bioaccumulation

Chemical Name	log Pow
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	2.8
TRIETHANOLAMINE 102-71-6	-2.53
ETHYLENE GLYCOL 107-21-1	-1.93
DIETHANOLAMINE 111-42-2	-2.18
ETHYLENE OXIDE 75-21-8	-0.3
1,4-DIOXANE 123-91-1	-0.42

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations. This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations. Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Pressurized container: Do not pierce or burn, even after use. Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground CONSUMER COMMODITY ORM-D
or
LIMITED QUANTITY

IATA UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, LTD. QTY

IMDG UN1950, AEROSOLS, 2.2,LTD. QTY.

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
PROPANE/ISOBUTANE/N-BUTANE	X	X	X	Not listed	X	X	X	X
TRIETHANOLAMINE	X	X	X	X	X	X	X	X
ETHYLENE GLYCOL	X	X	X	X	X	X	X	X
DIETHANOLAMINE	X	X	X	X	X	X	X	X
ETHYLENE OXIDE	X	X	X	X	X	X	X	X
1,4-DIOXANE	X	X	X	X	X	X	X	X

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
CHINA - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
ETHYLENE GLYCOL - 107-21-1	107-21-1	<0.01	1.0
DIETHANOLAMINE - 111-42-2	111-42-2	<0.001	1.0
1,4-DIOXANE - 123-91-1	123-91-1	<0.0001	0.1
ETHYLENE OXIDE - 75-21-8	75-21-8	<0.0001	0.1

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Star Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ETHYLENE GLYCOL 107-21-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
DIETHANOLAMINE 111-42-2	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
ETHYLENE OXIDE 75-21-8	10 lb	10 lb	RQ 10 lb final RQ RQ 4.54 kg final RQ
1,4-DIOXANE 123-91-1	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical Name	California Prop. 65
ETHYLENE GLYCOL - 107-21-1	Developmental (ingested)/ <0.01%
DIETHANOLAMINE - 111-42-2	Cancer / <0.001%
1,4-DIOXANE - 123-91-1	Cancer <0.0001%
ETHYLENE OXIDE - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive <0.0001%

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
DEIONIZED WATER 7732-18-5			X
TRIETHANOLAMINE 102-71-6	X	X	X
2-BUTOXYETHANOL 111-76-2	X	X	X
ETHYLENE GLYCOL 107-21-1	X	X	X
DIETHANOLAMINE 111-42-2	X	X	X
1,4-DIOXANE 123-91-1	X	X	X
ETHYLENE OXIDE 75-21-8	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

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

16. OTHER INFORMATION

NFPA	**Health Hazard** 1	**Flammability** 1	**Instability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 1	**Flammability** 1	**Physical Hazard** 1	**Personal protection** B

Prepared By
American Jetway Corporation
34136 Myrtle Street
Wayne, MI 48184-0126

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Revision Note
1 (M)SDS sections updated

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet