

SAFETY DATA SHEET.

Issuing date 26-Apr-2018

Revision Date 10-Sep-2018

Version 2.03

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

Product identifier

Product name 4615-0 GAL BATTERY CLEANER

Recommended use of the chemical and restrictions on use

Product code F01656

Product Type Non-flammable liquid
Synonyms None

Supplier's details

Recommended Use Battery Cleaner.
Uses advised against No information available

Manufactured For:
Imperial Supplies LLC
789 Armed Forces Drive
P.O. Box 11008
Green Bay, WI 53407-1008
1-800-558-2808

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

Emergency telephone number
Chemical Emergency Phone Number

CHEMTREC: 1-800-262-8200 ID 1195 (UNITED STATES)

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B

GHS Label elements, including precautionary statements

Emergency Overview

WARNING

Hazard Statements

Causes skin irritation.
Causes eye irritation.



The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Clear

Physical state Liquid

Odor Mild

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves, eye protection, face protection.

Precautionary Statements - Response

Specific treatment (see first aid on this label).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice, attention

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

If skin irritation occurs: Get medical advice, attention.

Take off contaminated clothing and wash it before reuse.

Hazards not otherwise classified (HNOC)

None

Other information

0.025% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
TRIETHANOLAMINE	102-71-6	1-10
ETHYLENE GLYCOL	107-21-1	<0.1
DIETHANOLAMINE	111-42-2	<0.01
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.
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.

Most important symptoms/effects, acute and delayed

Main Symptoms Causes eye and skin irritation.

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

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use with adequate ventilation 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 inert, 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. Handle in accordance with good industrial hygiene and safety practice. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

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. Keep cool.

Incompatible products Strong acids, alkalis, oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
TRIETHANOLAMINE 102-71-6	TWA: 5 mg/m ³	-	-
ETHYLENE GLYCOL 107-21-1	Ceiling: 100 mg/m ³ aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³	-
DIETHANOLAMINE 111-42-2	TWA: 1 mg/m ³ inhalable fraction and vapor Skin - potential significant contribution to overall exposure by the cutaneous route	(vacated) TWA: 3 ppm (vacated) TWA: 15 mg/m ³	TWA: 3 ppm TWA: 15 mg/m ³
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/m ³ 10 min/day TWA: 0.1 ppm less than stated value TWA: 0.18 mg/m ³ less than stated value
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/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 90 mg/m ³ (vacated) S* S*	IDLH: 500 ppm Ceiling: 1 ppm 30 min Ceiling: 3.6 mg/m ³ 30 min

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 Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

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	Liquid	Odor	Mild
Appearance	Clear	Odor Threshold	
Color	Amber		
Property	Values	Remarks • Methods	
pH	8.95	+/- 0.50	
Melting/freezing point	No information available		
Boiling point/boiling range			
Flash Point	61 °C / 143 °F	Based on lowest flashpoint of the products constituents.	
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	1.05		
Water solubility	Soluble in Water		
Partition coefficient: n-octanol/water			
Autoignition temperature	No information available		
Decomposition temperature			
Viscosity	No information available		
Explosive properties			
Other information			
VOC Content(%)	1		
EPA VOC (g/l)	10.5		
Actual VOC (lb/gal)	0.1		

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Strong acids, alkalis, oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide , Hydrogen Chloride, Phosgene, and Chlorine.

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	Irritating to eyes.
Skin contact	Causes skin irritation.
Ingestion	May be harmful if swallowed .

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
TRIETHANOLAMINE 102-71-6	= 4190 mg/kg (Rat)	> 20 mL/kg (Rabbit)	-
ETHYLENE GLYCOL 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat)	-
DIETHANOLAMINE 111-42-2	= 0.62 mL/kg (Rat)	-	-
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 µL/kg (Rabbit)	= 46 mg/L (Rat) 2 h

Information on toxicological effects

Symptoms Causes skin irritation. Causes eye irritation.

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

Skin corrosion/irritation Irritating to skin.
Eye damage/irritation Irritating to eyes.
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

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 0.025% 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 (inhalation-vapor) 303 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

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Chemical Name	log Pow
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** 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.**Contaminated packaging** Do not re-use empty containers.**14. TRANSPORT INFORMATION****DOT Ground** NOT REGULATED**IATA** NOT REGULATED**IMDG** NOT REGULATED**15. REGULATORY INFORMATION****International Inventories**

Chemical Name	TSCA	DSL/NDL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
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/NDL** - 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	<0.1	1.0
DIETHANOLAMINE - 111-42-2	111-42-2	<0.01	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	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
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:

Ethylene Glycol CAS # 107-21-1) is considered a Proposition 65 chemical for developmental only when ingested. The purpose of this product is not for ingestion.



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) <0.1%
DIETHANOLAMINE - 111-42-2	Cancer <0.01%
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
TRIETHANOLAMINE 102-71-6	X	X	X
ETHYLENE GLYCOL 107-21-1	X	X	X
DIETHANOLAMINE 111-42-2	X	X	X
ETHYLENE OXIDE 75-21-8	X	X	X
1,4-DIOXANE 123-91-1	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 0	Personal protection B
<i>Chronic Hazard Star Legend</i>		<i>Chronic Health Star Hazard Repeated or prolonged exposure may cause central nervous system damage</i>		

Prepared By American Jetway Corporation
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Revision Note

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