

# **Safety Data Sheet**

# 1. IDENTIFICATION

Product Name: Sealed Lead Acid Battery/	Product Use: Vehicle Electrical System
Optima Battery ™	Manufacturer/Supplier: Johnson Controls Battery Group
Synonyms: Sealed Lead Acid Battery	Address:
	P.O. Box 590
	Milwaukee, WI 53201 US
General Information Number: (800)-333-2222 ext. 3138	Emergency number: CHEMTREC: 800-424-9300
Contact Person: Industrial Hygiene & Safety Department	

NOTE: The Johnson Controls sealed cell/battery is considered an article as defined by 29 CFR 1910.1200 (OSHA Hazard Communication Standard). The information contained in this SDS is supplied at the customer's request for information only.

# 2. HAZARD(S) IDENTIFICATION

Health		Envi	ronmental	Phy	/sical
Acute Toxicity (Oral/Dermal/Inhalation	Category 4	Aquatic	Chronic 1	Explosive Chemical	Division 1.3
Skin Corrosion/Irritation	Category 1A	Aquatic	Acute 1		
Eye Damage	Category 1				
Reproductive	Category 1A				
Carcinogenicity (lead)	Category 2A				
Carcinogenicity (acid mist)	Category 1A				
Specific Target Organ Toxicity (Repeated exposure)	Category 1A				

# **Label Elements:**

	***		
Hazard Statements	Precautionary Statements		
DANGER!	Wash thoroughly after handling.		
Causes severe skin burns and eye damage. Causes	Do not eat, drink or smoke when using	this product.	
serious eye damage.	Wear protective gloves/protective clothing, eye protection/face protection.		
May damage fertility or the unborn child if	Avoid breathing dust/fume/gas/mist/vapors/spray.		
ingested or inhaled.	Use only outdoors or in a well-ventilate	ed area.	
May cause cancer if ingested or inhaled.	Causes skin irritation, serious eye dama	age.	
Causes damage to central nervous system, blood	Contact with internal components may cause irritation or severe burns. Avoid		
and kidneys through prolonged or repeated	contact with internal acid.		
exposure.	Irritating to eyes, respiratory system, a	nd skin.	

**Environmental** 

Health

**Physical** 

May form explosive air/gas mixture during	
charging.	
Extremely flammable gas (hydrogen).	
Explosive, fire, blast or projection hazard.	

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS (Chemical/Common Names):	CAS No.:	% by Wt:
Lead	7439-92-1	63 - 91
Sulfuric Acid	7664-93-9	17 - 25
Case Material Polypropylene	9010-79-1	2 - 6
Separator/Paster Paper Fibrous Glass	65997-17-3	<1 - 4

**Composition Comments** All concentrations are in percent by weight.

# 4. FIRST AID MEASURES

Note: Under normal conditions of battery use, internal components will not present a health hazard. The following information is provided for battery electrolyte (acid) and lead for exposures that may occur during battery production or container breakage or under extreme heat conditions such as fire.

Inhalation Sulfuric Acid: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Consult a physician.

Lead: Remove from exposure, gargle, wash nose and lips; consult physician.

Skin contact Sulfuric Acid: Flush with large amounts of water for at least 15 minutes; remove contaminated clothing

completely, including shoes. If symptoms persist, seek medical attention. Wash contaminated clothing

before reuse. Discard contaminated shoes. Lead: Wash immediately with soap and water.

Eye contact Sulfuric Acid and Lead: Flush immediately with large amounts of water for at least 15 minutes while lifting

lids; Seek immediate medical attention if eyes have been exposed directly to acid.

Sulfuric Acid: Give large quantities of water; Do NOT induce vomiting or aspiration into the lungs may Ingestion

occur and can cause permanent injury or death; consult physician.

Lead: Consult physician immediately.

# 5. FIRE FIGHTING MEASURES

**Flash Point** Hydrogen - 259 °C **Auto ignition** Hydrogen - 580 °C

**Temperature** 

**Procedures** 

**Flammable Limits** LEL = 4.1% (Hydrogen Gas in air); UEL = 74.2%

**Extinguishing** CO2; foam; dry chemical. Do not use carbon dioxide directly on cells. Avoid breathing vapors. Use

Media appropriate media for surrounding fire.

**Special Fire Fighting** Use positive pressure, self-contained breathing apparatus. Beware of acid splatter during water

> application and wear acid-resistant clothing, gloves, face and eye protection. If batteries are on charge, shut off power to the charging equipment, but note that strings of series connected batteries may still

pose risk of electric shock even when charging equipment is shut down.

**Unusual Fire and** Highly flammable hydrogen gas is generated during charging and operation of batteries. If ignited by **Explosion Hazard** 

burning cigarette, naked flame or spark, may cause battery explosion with dispersion of casing fragments and corrosive liquid electrolyte. Carefully follow manufacturer's instructions for installation and service. Keep away all sources of gas ignition and do not allow metallic articles to simultaneously contact the negative and positive terminals of a battery. Follow manufacturer's instructions for installation and

service.

# **6: ACCIDENTAL RELEASE MEASURES**

Protective Measures to be Taken if Material is Released or Spilled Stop flow of material, contain/absorb small spills with dry sand, earth, and vermiculite. Do not use combustible materials. If possible, carefully neutralize spilled electrolyte with soda ash, sodium

bicarbonate, lime, etc. Wear acid-resistant clothing, boots, gloves, and face shield. Do not allow discharge of un-neutralized acid to sewer. Acid must be managed in accordance with approved local, state, and

federal requirements. Consult state environmental agency and/or federal EPA.

Waste Disposal Method Dispose of as a hazardous waste. Dispose of in accordance with applicable local, state and federal

regulations.

#### 7. HANDLING AND STORAGE

**Handling** Do not carry battery by terminals. Do not drop battery, puncture, or attempt to open battery case. Avoid

contact with the internal components of a battery. Do not subject product to open flame or fire and avoid

situations that could cause arcing between terminals.

**Storage** Store batteries under roof in cool, dry, well-ventilated areas separated from incompatible materials and

from activities that may create flames, spark, or heat. Store sealed lead acid batteries at ambient

temperature.

**Charging:** There is a possible risk of electric shock from charging equipment and from strings of series connected

batteries, whether or not being charged. Shut-off power to chargers whenever not in use and before detachment of any circuit connections. Batteries being charged may generate and release flammable hydrogen gas. Charging space should be ventilated. Prohibit smoking and avoid creation of flames and

sparks nearby. Wear face and eye protection when near batteries being charged.

Other Follow Manufacturers Recommendations regarding maximum recommended currents and operating

temperature range. Do not overcharge beyond the recommended upper charging voltage limit. Applying pressure or deforming the battery may lead to disassembly followed by eye, skin and throat irritation.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

# Occupational exposure limits

US OSHA Specifically Regulated Substances (29 CFR 1910.1001 - 1050)

Ingredient	CAS Number	Туре	Value
Lead	7439-92-1	TWA	0.05 mg/m³

### US OSHA Table Z-1 Limits for Air Contaminants (29CFR 1910.1000)

Ingredient	CAS Number	Туре	Value
Sulfuric Acid	7664-93-9	PEL	1 mg/m³

# **US ACGIH Threshold Limit Values**

Ingredient	CAS Number	Туре	Value	Form
Lead	7439-92-1	TWA	0.05 mg/m <sup>3</sup>	
Sulfuric Acid	7664-93-9	TWA	0.2 mg/m <sup>3</sup>	Thoracic Fractions

# **US NIOSH: Pocket Guide to Chemical Hazards**

Ingredient	CAS Number	Туре	Value	Form
Sulfuric Acid	7664-93-9	TWA	1 mg/m³	
Separator/Paster Paper Fibrous Glass	65997-17-3	TWA	3 fibers/cm³ 5 mg/ m³ 5 mg/ m³	Fiber Fibers, total dust Fiber Total
Lead	7439-92-1	TWA	0.05 mg/m <sup>3</sup>	

## **Biological limit values**

## **ACGIH Biological Exposure Indices**

Ingredient	Value	Determinant	Specimen	Sampling Time
Lead	300 μg/l	Lead	Blood	*

<sup>\* -</sup> For Sampling details please see the source document.

#### **Engineering Controls (Ventilation):**

Store sealed lead acid batteries at ambient temperature. Never recharge batteries in an unventilated, enclosed space. Do not subject product to open flame or fire. Avoid conditions that could cause arcing between terminals.

# Respiratory Protection (NIOSH/MSHA approved):

NONE REQUIRED FOR NORMAL HANDLING OF THE FINISHED PRODUCT.

When concentrations of sulfuric acid mist are known to exceed PEL, use NIOSH or MSHA-approved respiratory protection.

#### **Skin Protection:**

NONE REQUIRED FOR NORMAL HANDLING OF THE FINISHED PRODUCT.

If battery case is damaged, use rubber or plastic acid-resistant gloves with elbow-length gauntlet, acid-resistant apron, clothing and boots.

#### **Eye Protection:**

NONE REQUIRED FOR NORMAL HANDLING OF THE FINISHED PRODUCT.

If necessary to handle damage product where exposure to the organic electrolyte is a possibility, chemical splash goggles and a face shield are recommended.

#### Other Protection:

Safety footwear meeting the requirements of ANSI Z 41.1 is recommended when it is necessary to handle the finished product.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance and Odor** Manufactured article; no apparent odor. Electrolyte is a clear liquid with a sharp, penetrating,

pungent odor.

Odor Threshold Not applicable. pH Not applicable

**Boiling Point** Not applicable unless individual components exposed.

Battery Electrolyte (Acid) - 230 - 233.6 °F (110 - 112 °C)

Lead - 3191 °F (1755 °C)

Melting Point Lead - 621.32 °F (327.4 °C)

**Specific Gravity** 1.215 to 1.350

 $(H_2O=1)$ 

Flash Point 498.2 °F (259.0 °C) Hydrogen

**Evaporation Rate** < 1

(Butyl Acetate = 1)

Vapor Pressure Battery Electrolyte (Acid) 11.7

(mm Hg @ 20 ° C) Flammability

**Upper/lower flammability** Hydrogen Flammability Limit Lower- 4.1 %

or explosive limits Flammability Limit Upper – 74.2 %

Vapor Pressure Not applicable.

Vapor Density3.4 (Air = 1) Battery Electrolyte (Acid)Relative Density1.21 - 1.3 Battery Electrolyte (Acid)SolubilityLead and Lead dioxide are not soluble.

100 % Battery Electrolyte (Acid).

**% Volatile by Weight** Not applicable unless individual components exposed.

Partition coefficient Not applicable

(n-octanol/water)

**Auto-ignition temperature** 1076 °F (580 °C) Hydrogen.

Decomposition temperature

Not applicable

Viscosity Not applicable

#### 10. STABILITY AND REACTIVITY

Stability The sealed battery is considered stable.

**Conditions to Avoid Incompatibility (materials**  Sparks and other sources of ignition; high temperature; over charging.

to avoid)

Electrolyte: Contact with combustibles and organic materials may cause fire and explosion. Also reacts violently with strong reducing agents, metals, sulfur trioxide gas, strong oxidizers, and water. Contact with metals may produce toxic sulfur dioxide fumes and may release flammable

hydrogen gas.

Lead compounds: Avoid contact with strong acids, bases, halides, halogenates, potassium nitrate,

permanganate, peroxides, nascent hydrogen, and reducing agents.

**Hazardous Decomposition** 

Electrolyte: Sulfur trioxide, carbon monoxide, sulfuric acid mist, sulfur dioxide, hydrogen sulfide.

**Products** 

Lead compounds: Temperatures above the melting point are likely to produce toxic metal fume, vapor, or dust; contact with strong acid or base or presence of nascent hydrogen may generate

highly toxic arsine gas.

**Hazardous Polymerization** 

Will not occur.

# 11. TOXICOLOGICAL INFORMATION

NOTE: Under normal conditions of use, this product does not present a health hazard. The following information is provided for organic electrolyte and lead exposure that may occur due to container breakage or under extreme conditions such as fire. Organic electrolyte - reacts with moisture/water to produce hydrofluoric acid in trace quantities. Hydrofluoric acid is extremely corrosive and toxic. In severe exposures it acts as a systemic poison and causes severe burns. The reaction may be delayed. Any contact with this material, even minor, requires immediate medical attention.

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Inhalation EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE.

> Sulfuric Acid: Breathing of sulfuric acid vapors or mists may cause severe respiratory irritation. Lead Compounds: Inhalation of lead dust or fumes may cause irritation of upper respiratory tract

**Skin Contact** EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE.

> Sulfuric Acid: Severe irritation, burns and ulceration. Lead Compounds: Not absorbed through the skin.

**Skin Absorption** EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE.

In the event of overcharging or damage to the unit, exposure to organic electrolyte solution/mist is

possible. Extreme exposures to the organic electrolyte can be absorbed through the skin.

**Eye Contact** EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE.

Sulfuric Acid: Severe irritation, burns, cornea damage, and blindness.

Lead Compounds: May cause eye irritation.

Ingestion EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE.

Sulfuric Acid: May cause severe irritation of mouth, throat, esophagus and stomach.

Lead Compounds: Acute ingestion may cause abdominal pain, nausea, vomiting, diarrhea and severe cramping. This may lead rapidly to systemic toxicity and must be treated by a physician.

SIGNS AND SYMPTONS OF OVEREXPOSURE

**Acute Effects** EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE.

> Sulfuric Acid: Severe skin irritation, damage to cornea, upper respiratory irritation. Lead Compounds: Symptoms of toxicity include headache, fatigue, abdominal pain, loss of

appetite, muscular aches and weakness, sleep disturbances and irritability

#### **Chronic Effects**

#### EXPOSURE IS NOT EXPECTED FOR PRODUCT UNDER NORMAL CONDITIONS OF USE.

Sulfuric Acid: Possible erosion of tooth enamel, inflammation of nose, throat & bronchial tubes. Lead Compounds: Anemia; neuropathy, particularly of the motor nerves, with wrist drop; kidney damage; reproductive changes in males and females. Repeated exposure to lead and lead compounds in the workplace may result in nervous system toxicity. Some toxicologists report abnormal conduction velocities in persons with blood lead levels of 50  $\mu$ g/100 ml or higher. Heavy lead exposure may result in central nervous system damage, encephalopathy and damage to the blood-forming (hematopoietic) tissues.

# **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**

Overexposure to sulfuric acid mist may cause lung damage and aggravate pulmonary conditions. Contact of sulfuric acid with skin may aggravate diseases such as eczema and contact dermatitis. Lead and its compounds can aggravate some forms of kidney, liver and neurologic diseases.

#### ADDITIONAL HEALTH DATA

All heavy metals, including the hazardous ingredients in this product, are taken into the body primarily by inhalation and ingestion. Most inhalation problems can be avoided by adequate precautions such as ventilation and respiratory protection covered in Section 8. Follow good personal hygiene to avoid inhalation and ingestion: wash hands, face, neck and arms thoroughly before eating, smoking or leaving the work site. Keep contaminated clothing out of non-contaminated areas, or wear cover clothing when in such areas. Restrict the use and presence of food, tobacco and cosmetics to non-contaminated areas. Work clothes and work equipment used in contaminated areas must remain in designated areas and never taken home or laundered with personal non-contaminated clothing. This product is intended for industrial use only and should be isolated from children and their environment.

The 19th Amendment to EC Directive 67/548/EEC classified lead compounds, but not lead in metal form, as possibly toxic to reproduction. Risk phrase 61: May cause harm to the unborn child, applies to lead compounds, especially soluble forms.

# **Toxicological Data**

Constituents	Species	Test Results
Sulfuric Acid (CAS 7664-93-9)		
Acute		
Oral		
LD50	Rat	2140 mg/kg

## **CARCINOGENICITY**

Sulfuric Acid: The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mist containing sulfuric acid" as a Category I carcinogen, a substance that is carcinogenic to humans. This classification does not apply to liquid forms of sulfuric acid or sulfuric acid solutions contained within a battery. Inorganic acid mist (sulfuric acid mist) is not generated under normal use of this product. Misuse of the product, such as overcharging, may result in the generation of sulfuric acid mist.

Lead Compounds: Lead is listed as a 2B carcinogen, likely in animals at extreme doses. Proof of carcinogenicity in humans is lacking at present.

IARC Monographs. Overall Evaluation of Carcinogenicity

Lead (CAS 7439-92-1) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**Reproductive toxicity** May damage fertility or the unborn child.

**Specific target organ** No data available.

toxicity -

single exposure

Specific target organ Lead: May cause damage to organs (blood, central nervous system) through prolonged or

toxicity - repeated exposure.

repeated exposure

**Aspiration hazard** Not classified.

#### 12. ECOLOGICAL INFORMATION

**Environmental Fate** Lead is very persistent in soil and sediments. No data on environmental degradation. Mobility of

metallic lead between ecological compartments is slow. Bioaccumulation of lead occurs in aquatic and terrestrial animals and plants but little bioaccumulation occurs through the food chain. Most

studies include lead compounds and not elemental lead

**Ecotoxicity** Very toxic to aquatic life with long lasting effects. However, no ecological impacts expected under

normal use conditions.

Constituents Species Test Results

Inorganic Lead/Lead Compounds (CAS 7439-92-1)

Aquatic

Fish LC50 Rainbow trout, Donaldson trout 1.17 mg/l, 96 hours

(Oncorhynchus mykiss)

Persistence and No data available

Degradability

Bioaccumulative potential No data available

Additional Information No known effects on stratospheric ozone depletion

Volatile organic compounds: 0% (by Volume)

Water Endangering Class (WGK): NA

#### 13. DISPOSAL CONSIDERATIONS

Waste disposal method Material should be recycled if possible. Lead-acid batteries are completely recyclable. Dispose

waste and residues in accordance with applicable federal, state, and local regulations.

Hazardous waste code D008: Lead

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or packaging may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

# 14. TRANSPORT INFORMATION

Note: Transportation requirements do not apply once the battery pack has been installed in a vehicle as part of the vehicle's functional components.

Transportation: Sealed Lead Acid / OPTIMA Battery is not a DOT Hazardous Material

Other: Per DOT, IATA, ICAO, and IMDG rules and regulations, these batteries are exempt from "UN2800" classification as a result of successful completion of the following tests:

- 1.) Vibration tests
- 2.) Pressure Differential Tests
- 3.) Case Rupturing Tests (no free liquids)

**United States DOT:** 

Not regulated as dangerous goods per 49 CFR 173.159a

**IATA** 

Not regulated as dangerous goods per Special Provision A67

**IMDG** 

Not regulated as dangerous goods per exception 238

### 15. REGULATORY INFORMATION

This product is an article pursuant to 29 CFR 1910.1200 and as such is not subjected to the OSHA Hazard Communication Standard. The information on this SDS is supplied at customer's request for information only.

#### **TSCA**

Ingredients listed in the TSCA registry are lead, lead compounds, and sulfuric acid.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Lead (CAS 7439-92-1) Reproductive toxicity

Central nervous system

Kidney Blood Acute toxicity

Acute toxicit

CERCLA Hazardous Substance List (40 CFR 302.4) Lead (CAS 7439-92-1) LISTED

Sulfuric Acid (CAS 7664-93-9) LISTED

Superfund Amendment and Reauthorization Act of 1986 (SARA)

Hazard Categories Immediate Hazard – Yes
Delayed Hazard – Yes

Fire Hazard – Yes Pressure Hazard – Yes Reactivity Hazard – Yes

SARA 302 Extremely hazardous substance

Threshold Threshold

Reportable Threshold Planning Quantity Planning Quantity

Chemical Name CAS Number Quantity Planning Quantity – Lower value – upper value

Sulfuric Acid 7664-93-9 1000 1000 lbs.

SARA 311/312 Hazard Categorization:

EPCRA Section 312 Tier Two reporting is required for non-automotive batteries if sulfuric acid is present in quantities of 500 lbs. or more and/or if lead is present in quantities of 10,000 lbs. or more. For more information consult 40 CFR 370.10 and 40 CFR 370.40

#### **SARA 313 EPCRA Toxic Substances:**

40 CFR section 372.38 (b) states: If a toxic chemical is present in an article at a covered facility, a person is not required to consider the quantity of the toxic chemical present in such article when determining whether an applicable threshold has been met under § 372.25, § 372.27, or § 372.28 or determining the amount of release to be reported under § 372.30. This exemption applies whether the person received the article from another person or the person produced the article. However, this exemption applies only to the quantity of the toxic chemical present in the article.

# SARA 313 (TRI Reporting)

Chemical Name	CAS Number	% by weight
Lead	7439-92-1	63 - 91
Sulfuric Acid	7664-93-9	17 - 25

#### Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Lead (CAS 7439-92-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Sulfuric Acid (CAS 7664-93-9)

Safe Drinking Water Act (SDWA)

Not regulated

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and

**Chemical Code Number** 

Sulfuric acid (CAS 7664-93-9) 6552

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Sulfuric acid (CAS 7664-93-9) 20 % WV

**DEA Exempt Chemical Mixtures Code Number** 

Sulfuric acid (CAS 7664-93-9 6552

**US State Regulations** 

US. Massachusetts RTK – Substance List

Lead ( CAS 7439-92-1) Sulfuric Acid (CAS 7664-93-9)

**US New Jersey Worker and Community Right-to-know Act** 

Lead (CAS 7439-92-1)

Sulfuric acid (CAS 7664-93-9)

Separator/Paster Paper Fibrous Glass (CAS 65997-17-3)

# US Pennsylvania Worker and Community Right-to-know Law

Lead (CAS 7439-92-1)

Sulfuric acid (CAS 7664-93-9)

#### **US Rhode Island RTK**

Lead (CAS 7439-92-1)

Sulfuric acid (CAS 7664-93-9)

# **US. California Proposition 65**

WARNING: This product contains chemicals known to the State of California to cause cancer.

Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the state of California to cause cancer and reproductive harm. Wash hands after handling.

\*Battery companies not party to the 1999 consent judgment with Mateel Environmental Justice Foundation should include a Proposition 65 Warning that complies with the current version of Proposition 65.

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Lead (CAS 7439-92-1)

Sulfuric acid (CAS 7664-93-9)

#### **International Inventories**

Country(s) or Region Inventory Name On inventory (yes/no)\*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Yes

Inventory

#### 16. OTHER INFORMATION

**Issue Date:** 04/01/2015

Revision Date: - 01
Version #: 01

Further information: NFPA Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3=Serious 4 = Severe

NFPA ratings



# **US Military National Stock Number (NSN)**

Model Number	P/N	NSN
34/78	8004-003	6140-01-374-2243
34	8002-002	6140-01-378-8232
34R	8003-151	6140-01-475-9357
34VX	8008-158	6140-01-534-6466
25	8025-160	
35	8020-164	
75/25	8022-091	6140-01-475-9361
78	8078-109	
850/6 – 1050 SLI	8010-044	6140-01-475-9414
DS46B24R	8171-767	
850/6 – 950 (DC)		
D51	8071-167	6140-01-523-6288
D51R	8073-167	6140-01-526-7226
D35	8040-218	
D75/25	8042-218	
D34	8012-021	6140-01-450-0141
D34/78	8014-045	6140-01-441-4272

<sup>\*</sup> A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

D27F	8037-127	6140-01-600-5785
D31T	8050-160	6140-01-457-5469
D31A	8051-160	6140-01-502-4973
34M	8006-006	6140-01-441-4280, 6140-01-526-2605
D34M	8016-103	6140-01-475-9355
D27M	8027-127	6140-01-589-0622
D31M	8052-161	6140-01-502-4405

#### Disclaimer

Johnson Controls Battery Group, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.