



## Safety Data Sheet

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This Safety Data Sheet (SDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a SDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

<b>Document Group:</b>	19-9534-9	<b>Version Number:</b>	5.01
<b>Issue Date:</b>	05/26/15	<b>Supersedes Date:</b>	10/13/14

### Product identifier

Turbo Systems

### ID Number(s):

70-0712-6771-3, 70-0712-6772-1, 70-0712-6773-9, 70-0712-6774-7, 70-0712-6775-4, 70-0712-6776-2, 70-0712-6777-0, 70-0712-6780-4, 70-0712-6781-2, 70-0712-6784-6, 70-0712-6785-3, 70-0712-6787-9, 70-0712-6789-5, 70-0712-6791-1, 70-0712-6793-7, 70-0712-6818-2, 70-0712-6819-0, 70-0712-6820-8, 70-0712-6821-6, 70-0712-6823-2, 70-0712-6825-7, 70-0712-6827-3, 70-0712-6829-9, 70-0712-6831-5, 70-0712-6833-1, 70-0712-6835-6, 70-0712-6837-2, 70-0712-6838-0, 70-0712-6839-8, 70-0712-8684-6, 70-0712-8685-3, 70-0712-8686-1, 70-0712-8687-9, 70-0712-8688-7, 70-0712-8689-5, 70-0712-8690-3, 70-0712-8691-1, 70-0714-0150-2, 70-0714-0151-0, 70-0714-0152-8, 70-0714-0153-6, 70-0714-0154-4, 70-0714-0155-1, 70-0714-0156-9, 70-0714-0157-7, 70-0715-1660-6, 70-0715-1661-4, 70-0715-1662-2, 70-0715-1663-0, 70-0715-1664-8, 70-0715-1665-5, 70-0715-4455-8, 70-0715-4456-6, 70-0715-4457-4, 70-0715-4458-2, 70-0715-4459-0, 70-0715-4460-8, 70-0716-0666-2, 70-0716-0667-0, 70-0716-0668-8, 70-0716-0669-6, 70-0716-0670-4, 70-0716-0671-2, 70-0716-0687-8, 70-0716-0688-6, 70-0716-0689-4, 70-0716-0690-2, 70-0716-0691-0, 70-0716-0692-8, 70-0716-0752-0, 70-0716-0753-8, 70-0716-0754-6, 70-0716-0755-3, 70-0716-0756-1, 70-0716-0757-9, 70-0716-0769-4, 70-0716-0770-2, 70-0716-0771-0, 70-0716-0772-8, 70-0716-0773-6, 70-0716-0774-4, 70-0716-2146-3, 70-0716-2147-1, 70-0716-2148-9, 70-0716-2164-6, 70-0716-2165-3, 70-0716-2166-1

### Recommended use

Battery, Battery

### Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Personal Safety Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

### Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

**This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included.**

**Please do not separate the component documents from this cover page. The document numbers for components of this product are:**

19-9154-6, 19-8039-0

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<b>Document Group:</b>	19-8039-0	<b>Version Number:</b>	2.01
<b>Issue Date:</b>	01/16/18	<b>Supersedes Date:</b>	01/02/18

### SECTION 1: Identification

#### 1.1. Product identifier

Intermediate - Lithium Manganese Dioxide Battery Intermediate

#### Product Identification Numbers

52-0001-7018-4, 70-0712-7294-5

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Battery

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Personal Safety Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

This product is exempt from hazard classification according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
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Non-Hazardous ingredients	None	33.6 - 83.5 Trade Secret *
MANGANESE DIOXIDE	1313-13-9	10 - 50 Trade Secret *
PROPYLENE CARBONATE	108-32-7	10 - 15 Trade Secret *
1,2-DIMETHOXYETHANE	110-71-4	1 - 5 Trade Secret *
LITHIUM	7439-93-2	1 - 5 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

No need for first aid is anticipated.

#### Skin Contact:

No need for first aid is anticipated.

#### Eye Contact:

No need for first aid is anticipated.

#### If Swallowed:

No need for first aid is anticipated.

## SECTION 5: Fire-fighting measures

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Not applicable.

### 6.2. Environmental precautions

Not applicable.

### 6.3. Methods and material for containment and cleaning up

Not applicable.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

### 7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

## SECTION 8: Exposure controls/personal protection

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical

under normal use conditions. No engineering controls or personal protective equipment (PPE) are necessary.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Solid
<b>Specific Physical Form:</b>	Battery
<b>Odor, Color, Grade:</b>	Odorless, metallic, geometric object.
<b>Odor threshold</b>	<i>Not Applicable</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	<i>Not Applicable</i>
<b>Flash Point</b>	No flash point
<b>Evaporation rate</b>	<i>Not Applicable</i>
<b>Flammability (solid, gas)</b>	Not Classified
<b>Flammable Limits(LEL)</b>	<i>Not Applicable</i>
<b>Flammable Limits(UEL)</b>	<i>Not Applicable</i>
<b>Vapor Pressure</b>	<i>Not Applicable</i>
<b>Vapor Density</b>	<i>Not Applicable</i>
<b>Density</b>	<i>No Data Available</i>
<b>Specific Gravity</b>	<i>No Data Available</i>
<b>Solubility In Water</b>	<i>Not Applicable</i>
<b>Solubility- non-water</b>	<i>Not Applicable</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	<i>Not Applicable</i>
<b>Decomposition temperature</b>	<i>Not Applicable</i>
<b>Viscosity</b>	<i>Not Applicable</i>
<b>Volatile Organic Compounds</b>	<i>Not Applicable</i>
<b>Percent volatile</b>	<i>Not Applicable</i>
<b>VOC Less H2O &amp; Exempt Solvents</b>	<i>Not Applicable</i>

## SECTION 10: Stability and reactivity

This material is considered to be non reactive under normal use conditions.

## SECTION 11: Toxicological information

### Inhalation:

No health effects are expected

### Skin Contact:

No health effects are expected

### Eye Contact:

No health effects are expected

### Ingestion:

No health effects are expected

### Additional Information:

This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

**SECTION 12: Ecological information**

This article is expected to present a low environmental risk either because use and disposal are unlikely to result in a significant release of components to the environment or because those components that may be released are expected to have insignificant environmental impact.

**SECTION 13: Disposal considerations**

Dispose of contents/container in accordance with the local/regional/national/international regulations.

**SECTION 14: Transport Information**

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: Regulatory information****Chemical Inventories**

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory requirements.

**SECTION 16: Other information****NFPA Hazard Classification**

**Health:** 0 **Flammability:** 2 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**HMIS Hazard Classification**

**Health:** 0 **Flammability:** 2 **Physical Hazard:** 0 **Personal Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

**Document Group:** 19-8039-0  
**Issue Date:** 01/16/18

**Version Number:** 2.01  
**Supersedes Date:** 01/02/18

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**Document Group:** 19-9154-6  
**Issue Date:** 02/24/16

**Version Number:** 2.00  
**Supersedes Date:** 06/02/14

### SECTION 1: Identification

#### 1.1. Product identifier

Nickel Metal Hydride Batteries

#### Product Identification Numbers

52-0001-6987-1, 70-0712-6846-3

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Battery

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Personal Safety Division  
**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA  
**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

This product is exempt from hazard classification according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
NICKEL	7440-02-0	10 - 30 Trade Secret *



NICKEL HYDROXIDE	12054-48-7	10 - 30 Trade Secret *
NICKEL OXIDE	1313-99-1	10 - 30 Trade Secret *
STEEL MANUFACTURE, CHEMICALS	65997-19-5	15 - 25 Trade Secret *
POTASSIUM HYDROXIDE	1310-58-3	5 - 15 Trade Secret *
WATER, PAPER, PLASTIC, OTHER	None	5 - 10 Trade Secret *
COBALT	7440-48-4	1 - 5 Trade Secret *
COBALT HYDROXIDE (CO(OH) <sub>2</sub> )	21041-93-0	1 - 5 Trade Secret *
COBALT OXIDE	1307-96-6	1 - 5 Trade Secret *
LITHIUM HYDROXIDE	1310-65-2	0 - 5 Trade Secret *
SODIUM HYDROXIDE	1310-73-2	0 - 5 Trade Secret *
ZINC	7440-66-6	1 - 5 Trade Secret *
ZINC HYDROXIDE	20427-58-1	1 - 5 Trade Secret *
ZINC OXIDE	1314-13-2	1 - 5 Trade Secret *
ALUMINUM	7429-90-5	0 - 2 Trade Secret *
MANGANESE	7439-96-5	0 - 2 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

No need for first aid is anticipated.

#### Skin Contact:

No need for first aid is anticipated.

#### Eye Contact:

No need for first aid is anticipated.

#### If Swallowed:

No need for first aid is anticipated.

## SECTION 5: Fire-fighting measures

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Not applicable.

### 6.2. Environmental precautions

Not applicable.

### 6.3. Methods and material for containment and cleaning up

Not applicable.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

## 7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

## SECTION 8: Exposure controls/personal protection

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions. No engineering controls or personal protective equipment (PPE) are necessary.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Solid
<b>Specific Physical Form:</b>	battery
<b>Odor, Color, Grade:</b>	Odorless, metallic, geometric objects.
<b>Odor threshold</b>	<i>Not Applicable</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	<i>Not Applicable</i>
<b>Flash Point</b>	No flash point
<b>Evaporation rate</b>	<i>Not Applicable</i>
<b>Flammability (solid, gas)</b>	Not Classified
<b>Flammable Limits(LEL)</b>	<i>Not Applicable</i>
<b>Flammable Limits(UEL)</b>	<i>Not Applicable</i>
<b>Vapor Pressure</b>	<i>Not Applicable</i>
<b>Vapor Density</b>	<i>Not Applicable</i>
<b>Density</b>	<i>No Data Available</i>
<b>Specific Gravity</b>	<i>No Data Available</i>
<b>Solubility In Water</b>	<i>Not Applicable</i>
<b>Solubility- non-water</b>	<i>Not Applicable</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	<i>Not Applicable</i>
<b>Decomposition temperature</b>	<i>Not Applicable</i>
<b>Viscosity</b>	<i>Not Applicable</i>
<b>Volatile Organic Compounds</b>	<i>Not Applicable</i>
<b>Percent volatile</b>	<i>Not Applicable</i>
<b>VOC Less H2O &amp; Exempt Solvents</b>	<i>Not Applicable</i>

## SECTION 10: Stability and reactivity

This material is considered to be non reactive under normal use conditions.

## SECTION 11: Toxicological information

### Inhalation:

No health effects are expected

### Skin Contact:

No health effects are expected

### Eye Contact:

No health effects are expected

**Ingestion:**

No health effects are expected

**Additional Information:**

This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

## SECTION 12: Ecological information

This article is expected to present a low environmental risk either because use and disposal are unlikely to result in a significant release of components to the environment or because those components that may be released are expected to have insignificant environmental impact.

## SECTION 13: Disposal considerations

Dispose of contents/container in accordance with the local/regional/national/international regulations.

## SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: Regulatory information

**Chemical Inventories**

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory requirements.

California Proposition 65

<u><b>Ingredient</b></u>	<u><b>C.A.S. No.</b></u>	<u><b>Classification</b></u>
NICKEL HYDROXIDE	12054-48-7	Carcinogen
COBALT OXIDE	1307-96-6	Carcinogen
NICKEL OXIDE	1313-99-1	Carcinogen
NICKEL	7440-02-0	Carcinogen
COBALT	7440-48-4	Carcinogen

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

## SECTION 16: Other information

**NFPA Hazard Classification**

**Health:** 0 **Flammability:** 2 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**HMIS Hazard Classification**

**Health: 0 Flammability: 2 Physical Hazard: 0 Personal Protection: X** - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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