

# SAFETY DATA SHEET

#### 1. Identification

Product identifier SIR-CHEM® DRY POWDER 61 GRAY

Other means of identification Not available.

Recommended use Non-destructive testing.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Company name
Address
Circle Systems, Inc.
1210 Osborne Road

Saint Marys, GA 31558

**Telephone** 912-729-2735

E-mail customerservice@circlesafe.com

Emergency phone number Chem-Tel 800-255-3924 (US & Canada); 1-813-248-0585 (International)

## 2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity. Category 2

OSHA defined hazards Combustible dust.

Label elements Hazard symbol



Signal word Warning.

**Hazard statement** Suspected of causing cancer. May form combustible dust concentrations in air.

**Precautionary statement** 

Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Prevent dust accumulation to minimize explosion hazard. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/

Tools and Supplies for Engine Builders

156 Galewski Drive • Winona, MN 55987-0847 Toll-Free 1-800-533-8010 • www.goodson.com

Sold as: WCD-100-G, WCD-500-G &

WCD-2500-G

eye protection/face protection.

**Response** Remove and wash contaminated clothing before re-use. In case of fire: Use appropriate media

for extinction. If exposed or concerned: Get medical advice/attention.

**Storage** Store locked up. Store away from incompatible materials.

Disposal Dispose of contents/containers in accordance with local/regional/national/international

regulations. Not classified.

Hazard(s) not otherwise

classified (HNOC)

**Supplemental information** Not applicable.

## 3. Composition/information on ingredients

## **Mixtures**

Chemical name	CAS number	%
Iron Powder	7439-89-6	> 90
Titanium Dioxide (alternative CAS # 1317-70-0)	13463-67-7	< 10

#### 4. First-aid measures

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Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

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Eye contact Ingestion Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Dust may cause eye, skin and respiratory tract irritation.

Indication of immediate medical attention and special treatment needed

**General information** 

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

nent needed

Ensure that medical personnel are aware of the material(s) involved, and take precautions

to protect themselves.

## 5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Apply extinguishing media

carefully to avoid creating airborne dust.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.

Special protective equipment and precautions for firefighters Fire-fighting Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.

General fire hazards

equipment/instructions

Heat may cause the containers to explode. May form combustible dust concentrations in air.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Use only non-sparking tools. Wear appropriate personal protective equipment. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Large Spills: Sweep or shovel up material and place in a clearly labeled container for waste. Following product recovery, flush area with water.

Small Spills: Collect dust using a vacuum cleaner equipped with HEPA filter.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the

**Environmental precautions** 

Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Explosion proof exhaust ventilation is recommended. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid prolonged exposure.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep away from heat, sparks and open flame.

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## 8. Exposure controls/personal protection

#### Occupational exposure limits

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

ComponentsTypeValueFormTitanium DioxidePEL15 mg/m3Total dust.

(alternative CAS # 1317-70-0) (CAS 13463-67-7)

US ACGIH Threshold Limit Values

 Components
 Type
 Value
 Form

 Titanium Dioxide
 TWA
 10 mg/m3

(alternative CAS # 1317-70-0) (CAS 13463-67-7)

**Biological limit values**No biological exposure limits noted for the ingredient(s).

**Exposure guidelines** No exposure standards allocated.

Appropriate engineering

controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not

been established, maintain airborne levels to an acceptable level.

## Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

Skin protection

**Hand protection** For prolonged or repeated skin contact use suitable protective gloves.

Other Wear suitable protective clothing.

**Respiratory protection** If engineering controls do not maintain airborne concentrations below recommended exposure

limits (where applicable) or to an acceptable level (in countries where exposure limits have not

been established), an approved respirator must be worn.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene** When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking.

Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

**Appearance** 

Physical state Solid. Powder. Form Color Gray. Odor Odorless Odor threshold Not available. pН Not available. Melting point/freezing point 2795 °F (1535 °C) Initial boiling point and boiling Not available. range

range
Flash point

Evaporation rate

Flammability (solid, gas)

Upper/lower flammability or explosive limits

Not available.

Not available.

Flammability limit – lower

Not available.

(%)

Flammability limit – upper

Not available.

(%)

Explosive limit – lower (%) Not available.

**Explosive limit – upper (%)** Not available.

Vapor pressureNot available.Vapor densityNot available.

Specific gravity 2.5 at 68 ° F (20 °C)
Solubility(ies) Insoluble in water

Solubility(ies)

Partition coefficient
(n-octanol/water)

Auto-ignition temperature

Decomposition temperature

Viscosity

Insoluble in water.

Not available.

Not available.

Not available.

Other information

VOC (Weight %) Not available.

## 10. Stability and reactivity

**Reactivity**The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

**Conditions to avoid** Keep away from heat, sparks and open flame. Minimize dust generation and accumulation.

Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

## 11. Toxicological information

#### Information on likely routes of exposure

IngestionExpected to be a low ingestion hazard.InhalationInhalation of dusts may cause respiratorySkin contactirritation. Dust or powder may irritate the skin.

**Eye contact** Dust may irritate the eyes.

Symptoms related to the physical, chemical and toxicological characteristics Information on toxicological effects

Dust may cause eye, skin and respiratory tract irritation. physical, chemical and toxicological characteristics

**Acute toxicity** Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Components Species Test Results

Iron Powder (CAS 7439-89-6)

**Acute** Oral

LD50 Rat 30 g/kg

Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)

Acute

Inhalation

LC50 Rat > 2.28 mg/l, 4 Hours

Oral

LD50 Rat > 11000 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation. Direct

Serious eye damage/eye contact with eyes may cause temporary irritation.

Not a respiratory sensitizer.

Respiratory sensitization

This was deally and a second of the second o

Skin sensitization

This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**No data available to indicate product or any components present at greater than 0.1%

are mutagenic or genotoxic.

**Carcinogenicity** Suspected of causing cancer.

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IARC Monographs. Overall Evaluation of Carcinogenicity

Titanium Dioxide (alternative CAS # 1317-70-0) 2B Possibly carcinogenic to humans.

(CAS 13463-67-7)

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity**The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Not available.

Other adverse effects

Mobility in soil

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions**Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Waste from residues / unused products

Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe

manner (see: Disposal instructions).

No data available for this product.

## 14. Transport information

DOT

Not regulated as dangerous goods.

**IATA** 

Not regulated as dangerous goods.

**IMDG** 

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not applicable.

the IBC Code

#### 15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt D)

Not regulated.

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

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard Categories** Immediate Hazard – No

Delayed Hazard – Yes Fire Hazard – Yes Pressure Hazard – No Reactivity Hazard – No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

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#### SARA 313 (TRI reporting)

Not regulated.

#### Other federal regulations

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

#### **US** state regulations

#### **US Massachusetts RTK - Substance List**

Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)

#### US New Jersey Worker and Community Right-to-Know Act

Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)

#### **US Pennsylvania RTK - Hazardous Substances**

Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)

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

Not regulated.

#### **US California Proposition 65**

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

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

Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)

Inventory name

# International Inventories Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical	Yes
	Substances (EINECS)	
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

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

Toxic Substances Control Act (TSCA) Inventory

#### 16. Other information, including date of preparation or last revision

Issue date 12-May-2014
Revision date 01-January-2022

Version # 06

United States & Puerto Rico

Further information Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the

Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe

HMIS® ratings handling.

Health: 1 Flammability: 1 Physical hazard: 0

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Yes

On inventory (yes/no)\*

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).

#### **NFPA Ratings**



List of abbreviations LC50: Lethal Concentration, 50%

LD50: Lethal Dose, 50%

PEL: Permissible exposure limit TWA: Time weighted average

References HSDB® - Hazardous Substances Data Bank

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