

SAFETY DATA SHEET

Issue Date October 29, 2015

Revision Date

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name **FSD**

Other means of identification

Product Code 41700
Synonyms None

Details of the supplier of the safety data sheet

Company Name TITAN INDUSTRIAL CHEMICALS, LLC
P.O. BOX 635
GROVER, MO. 63040
636-273-9033

Emergency telephone number

Emergency Telephone **INFOTRAC 1-800-535-5053**

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Skin corrosion/irritation	Category 3
Eye damage/irritation	Category 2b

Label elements

Emergency Overview

Warning

Hazard statements

Causes mild skin irritation
Causes eye irritation

No pictogram required

Appearance Clear

Physical state Liquid

Odor Odorless

Precautionary Statements - Prevention

Wash thoroughly after handling
Wear protective gloves

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

If on SKIN: wash with plenty of water. If irritation occurs get medical advice/attention. Take off contaminated clothing and wash it before reuse.

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/

Precautionary Statements - Storage

Store in original container, upright with cap tightly closed.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

May be harmful if swallowed. Harmful to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Aluminum sulfate	10043-01-3	1-10	*

*The exact percentage (concentration) of composition has been withheld as a trade secret. The exact identities of other ingredients has also been withheld as a Trade Secret. However, they do not contribute to the identified hazards of the product and will be divulged to proper authorities in an emergency.

4. FIRST AID MEASURES

First aid measures**Skin Contact**

Immediately wash skin with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If irritation occurs get medical advice/attention.

Eye contact

Remove contact lenses if present and safe to do so. Immediately rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. If irritation is evident, seek medical advice/attention.

Inhalation

Remove to fresh air. Get medical advice/attention if you feel unwell.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. If vomiting occurs spontaneously, keep airways clear. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms and effects, both acute and delayed**Symptoms**

Any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed**Note to physicians**

Treat symptomatically. Aluminum soluble salts may cause gastroenteritis if ingested. Treatment includes the use of demulcents.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water fog, carbon dioxide, foam, dry chemical.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Decomposition may produce sulfur trioxide, an oxidizing agent which will support combustion. Sulfur trioxide will react with water to form sulfuric acid.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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 None required for normal use of product.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information. Prevent further spillage into waterways or sewers.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Keep container closed. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Exposure guidelines noted for ingredient(s).

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH

No hazardous ingredients with established exposure limits.

Other Information None available

Appropriate engineering controls

Engineering Controls No special controls required.

Individual protection measures, such as personal protective equipment

Eye/face protection No special equipment required.

Skin and body protection None required for normal use of product.

Respiratory protection None required for normal use of product.

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

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state Liquid
Appearance Clear
Color Colorless
Odor Odorless
Odor threshold No Information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4.0-5.0	
Specific Gravity	1.00	
Viscosity	Water like	
Melting point/freezing point	No Information available	
Flash point	>200 No Information available	
Boiling point / boiling range	No information available	
Evaporation rate	No Information available	
Flammability (solid, gas)		
Flammability Limits in Air		
Upper flammability limit:	Not Applicable	
Lower flammability limit:	Not Applicable	
Vapor pressure	No Information available	
Vapor density	No Information available	
Water solubility	Complete	
Partition coefficient	No Information available	
Autoignition temperature	No Information available	
Decomposition temperature	No Information available	

Other Information

Density Lbs/Gal 8.33
VOC Content (%) 0

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

Extremes of temperature and direct sunlight.

Incompatible materials

Strong alkalis

Hazardous Decomposition Products

Oxides of aluminum and sulfur.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Product Information	May be irritating to skin and eyes.
Inhalation	N/A
Eye contact	Avoid contact with eyes.
Skin Contact	Prolonged or repeated contact may dry skin and cause irritation.
Ingestion	Not an expected route of exposure. Do not taste or swallow. May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Aluminum sulfate CAS 10043-01-3	=1930mg/kg (rat)	-	-

Information on toxicological effects

Symptoms No Information available.

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

Sensitization No Information available.
Germ cell mutagenicity No Information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA

Reproductive toxicity No Information available.
STOT - single exposure No Information available.
STOT - repeated exposure No Information available.
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

12. ECOLOGICAL INFORMATION**Ecotoxicity**

20.1% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea

Aluminum sulfate CAS 10043-01-3	-	LC50(96hr)=100mg/L (carassius auratus) LC50(96hr static)=37mg/L (gambusia affinis)	EC50(15min)=136mg/L (daphnia magna)

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Other adverse effects

No Information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT

Not regulated

15. REGULATORY INFORMATION

International Inventories**TSCA**

Complies

DSL/NDSL

Complies

Legend:**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (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). 5000 lb. RQ

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material. 5000 lb RQ.

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
None	

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Aluminum sulfate	Sn0068	Present	Environmental hazard

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 1	Flammability 0	Instability 0	Physical and Chemical Properties Yes
<u>HMIS</u>	Health hazards 1	Flammability 0	Physical hazards 0	Personal protection X

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Revision Note

No Information available

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet