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SDS Report

No. SHAHG1404802303 A01

Date: Apr. 9, 2014

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Shandong Sanfeng Group Co.,Ltd
No.693 Yanbei Road, Boshan, Zibo, Shandong, China

THIS REPORT IS TO SUPERSEDE REPORT NO.SHAHG1404802301 DATE:2014/04/09.

SGS Ref. No.	: QDHG201400711
Sample Name	: Aluminium Sulfate
End Uses	: Flocculant, industrial additives
Composition/Ingredient of sample (as per client submission)	: See Section 3 Composition/information on ingredients on the SDS report
Job Receiving Date	: Mar 26, 2014
Last Information Date	: Mar 31, 2014
SDS Preparation Period	: Mar 26-Apr 03, 2014

Service Requested : Preparation of Safety Data Sheet (SDS) for the sample with submitted information.

Summary : As per request, the contents and formats of the SDS are prepared in accordance with European Commission Directives 67/548/EEC, 1999/45/EC, Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 and Regulation (EU) No 453/2010, and is provided per attached.

Signed for and on behalf of
SGS-CSTC Ltd.

Terry Wang
Approved Signatory



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Safety Data Sheet
Regulation(EC) No.1907/2006, 1272/2008

Printing date 09.04.2014

Revision: 31.03.2014

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- Product identifier
- Trade name: Aluminium Sulfate
- Registration number: Data not available.
- Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the preparation: Flocculant, industrial additives
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
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- Reference Number: QDHG201400711; SHAHG1404802303 A01

SECTION 2: Hazards identification

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H335 May cause respiratory irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R37/38-41: Irritating to respiratory system and skin. Risk of serious damage to eyes.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- Label elements
- Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
- Hazard pictograms



GHS05



GHS07

- Signal word Danger

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- **Hazard-determining components of labelling:**
aluminium sulphate
- **Hazard statements**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards** Not applicable.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:**
Mixture of the substances listed below with nonhazardous additions.
For the wording of the listed risk phrases refer to section 16.

· **Dangerous components:**

CAS: 10043-01-3	aluminium sulphate	58,0%
EINECS: 233-135-0	<input checked="" type="checkbox"/> Xi R37/38-41 R52/53 <input checked="" type="checkbox"/> Eye Dam. 1, H318; <input checked="" type="checkbox"/> Skin Irrit. 2, H315; STOT SE 3, H335; Aquatic Chronic 3, H412	

· **Non-dangerous components:**

CAS: 7732-18-5	Water	42,0%
EINECS: 231-791-2		

SECTION 4: First aid measures

- **Description of first aid measures**
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth with water.
If symptoms persist consult doctor.
Never give anything by mouth to an unconscious person.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂ powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**
Wear fully protective suit.
Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
Avoid formation of dust.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Avoid contact with eyes.
Avoid contact with skin.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **Handling**
- **Precautions for safe handling**
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
Avoid contact with eyes.
Avoid contact with skin.
- **Information about fire - and explosion protection:** Normal measures for preventive fire protection.
- **Storage:**
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidizing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

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· *Specific end use(s) No further relevant information available.*

SECTION 8: Exposure controls/personal protection

· *Additional information about design of technical facilities: No further data; see item 7.*

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

10043-01-3 aluminium sulphate

VME (France) Long-term value: 2 mg/m³

· **DNELs:** Data not available.

· **PNECs:** Data not available.

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· *Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure*

· **Personal protective equipment**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Suitable respiratory protective device recommended.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

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SECTION 9: Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: White Crystalline Solid

Colour: White

· **Odour:** Odourless

· **Odour threshold:** Data not available.

· **pH-value:** Data not available.

· **Change in condition:**

Melting point/Melting range: Data not available.

· **Freezing point:** Data not available.

· **Boiling point/Boiling range:** Data not available.

· **Flash point:** Data not available.

· **Flammability (solid, gaseous):** Data not available.

· **Auto-ignition temperature:** Data not available.

· **Decomposition temperature:** Data not available.

· **Self-igniting:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits**

Lower: Data not available.

Upper: Data not available.

· **Oxidizing properties:** Data not available.

· **Vapour pressure:** Data not available.

· **Density:** Data not available.

· **Relative density:** Data not available.

· **Vapour density:** Data not available.

· **Evaporation rate:** Data not available.

· **Solubility in / Miscibility with water at 20 °C:** 410 g/l

· **Partition coefficient (n-octanol/water):** Data not available.

· **Viscosity:**

Dynamic: Data not available.

Kinematic: Data not available.

· **Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **Reactivity** No decomposition if used according to specifications.
- **Chemical stability** Stable under recommended storage conditions.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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SECTION 11: Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **LD/LC50 values relevant for classification:** Data not available.
- **Primary irritant effect**
- **on the skin:** Irritating effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible.
- **Toxicokinetics, metabolism and distribution:** No further relevant information available.
- **Acute effects (acute toxicity, irritation and corrosivity):** No further relevant information available.
- **Repeated dose toxicity:** No further relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**
No further relevant information available.

SECTION 12: Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|-------------------------------------|-----------------|
| · UN-Number | |
| · ADR, IMDG, IATA | Not applicable. |
| · UN proper shipping name | |
| · ADR, IMDG, IATA | Not applicable. |
| · Transport hazard class(es) | |
| · ADR, IMDG, IATA | |
| · Class | Not applicable. |
| · Packing group | |
| · ADR, IMDG, IATA | Not applicable. |

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- **Environmental hazards**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

SECTION 15: Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **MAK(German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **National regulations:**

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **Other regulations, limitations and prohibitive regulations**

· **SVHC Candidate List of REACH Regulation Annex XIV Authorisation (16/12/2013)**

None of the ingredients is listed.

· **REACH Regulation Annex XVII Restriction (27/3/2014)**

None of the ingredients is listed.

· **REACH Regulation Annex XIV Authorisation List (17/4/2013)**

None of the ingredients is listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

· **Relevant phrases**

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The contents and format of this SDS are in accordance with REGULATION (EC) No 1272/2008, REGULATION (EC) No 1907/2006, Regulation (EU) No 453/2010 and EU Commission Directive 1999/45/EC, 67/548/EEC.

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· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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