

MATERIAL SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 REACH

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1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

Trademark: Arichem HES2-FR

Product Code: Arichem HES2-FR

Product Description: High Efficiency Sulfonate
CAS name: Complex Sulphonate Salt Blend

Product Type: Commercial Product
(Product is a compound or mixture)

Recommended use: May be used as a flame retardant in polycarbonate resin formulations

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Manufacturer: Arichem LLC
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2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

White crystalline powder
 No characteristic odor
 Spilled material may create slipping hazard
 Can burn in a fire producing toxic smoke
 Decomposition products are toxic.
 No other significant fire, explosion or health hazard.

Skin Contact: May cause minor skin irritation

Eye Contact: Powder particles may be irritating to the eyes

Inhalation: Powder particles may be irritating – avoid inhalation

Ingestion: Effects unknown. If ingested, get trained medical help.

Other Information: For skin or eye contact, flush affected areas with water continuing for 20 minutes

3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS/EC/Index/REACH No	Concentration	% b-w
Proprietary Sulphonate Salt Blend	100%	% b-w

All components are listed on TSCA Inventory. See Sections 8 and 11 for exposure information.
 This product does not contain substances to be mentioned according to EU Regulation No. 1907/2006 (REACH), annex II.
 Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 99/45/EC unless indicated.

4. FIRST AID MEASURES

If inhaled: Move to fresh air in the event of inhalation of concentrated dust. Give artificial respiration if not breathing; Give oxygen if breathing is difficult. Call for trained medical help.

On skin contact: Flush contacted skin areas with water for 20 minutes

On eye contact: Flush eyes with water for 20 minutes

On ingestion: Effects unknown. If ingested, get trained medical help.

Precautions: In all cases, get trained medical help immediately.

5. FIRE FIGHTING MEASURES

Autoignition Temperature:	Not established
Explosive Limits:	Not a significant explosion hazard.
Upper	Not established
Lower	Not established
Suitable Extinguishing Media:	Use dry chemical, CO ₂ , water fog, or regular foam.
Unsuitable Extinguishing Media:	Solid water stream not recommended.
Hazardous Decomposition Products:	Vapors containing carbon dioxide, carbon monoxide, Oxides of SO _x type
Special Protective Equipment for Firefighters:	Self-contained breathing apparatus (NEN-EN137) and full protective fire fighting clothing
Specific Hazards:	Flash Point: 950 °F (496 °C) Vapors are toxic

6. ACCIDENTAL RELEASE MEASURES

Clean up:	Collect for recycle into suitable containers for disposal.
Personal precautions:	See Section 8
Environmental Precautions:	Do not release into waterways or the environment

7. HANDLING AND STORAGE

Handling:	Handle in a well-ventilated area. If adequate ventilation is not possible, use a NIOSH/MSHA or other approved dust/mist respirator or airline supplied respirator depending on concentrations. See section 8. Eye protection. Rubber gloves.
Storage:	Store in closed container in cool, well ventilated location. Keep away from combustibles and other reactive materials. See Section 10. Rotate stock. Do not puncture containers.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits:	No information unless noted below
Engineering Measures to Reduce Exposure	PEL for nuisance dust is 15 mg/m ³ for total dust and 5 mg/m ³ for the respirable fraction. Ventilate use area to maintain dust concentrations below the PEL. If such ventilation fails or is not available, use NIOSH/MSHA dust/mist respirator (or equivalent). Use good industrial safety practices.
Hand Protection:	Rubber gloves (NEN-EN 374)
Eye Protection:	Safety glasses with side shields (NEN-EN 165-166).
Respiratory Protection:	Self contained breathing apparatus in case of abnormal conditions and suitable respiratory equipment in case of insufficient ventilation (NEN-EN 149)
Body Protection:	Long sleeved clothing (NEN-EN 340-369-465)
Hygiene Measures:	When using, avoid eating, drinking, smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Appearance:	Crystalline Powder
Color:	White
Odor:	None
Melting Point/Range:	Not established
Autoignition Temperature:	Not established
Vapor Pressure:	Not established
Water Solubility:	~ 30 g/100 ml at 77 °F (25 °C)
Evaporation Rate:	Not established
Specific Gravity:	>1 (water = 1)
VOC content (%)	Negligible
Explosive Limits:	Not a significant explosion hazard.
Upper	Not established
Lower	Not established

10. STABILITY AND REACTIVITY

Stability:	Stable under ambient conditions. Hazardous polymerization does not occur.
Conditions to avoid:	Avoid elevated temperatures (950 °F or 496 °C) Do not use without adequate ventilation.
Hazardous Decomposition Products:	Decomposition vapors include SO _x type

11. TOXICOLOGICAL INFORMATION

LD50/oral/rat:	Not established
LD50/dermal/rabbit:	Not established
Subchronic toxicity:	No information available
Primary Irritation:	Skin
IARC:	Not listed
OSHA:	Not listed
NTP:	Not listed
Remarks:	Toxicological data has been taken from products of similar composition
Special Studies:	None

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects:	Do not flush into surface water or sanitary sewer system
Ecotoxicity – Invertebrate Data:	Ecological damages are not known or expected under normal use
Germany VCI (WGK):	0

13. DISPOSAL CONSIDERATIONS

Waste from residues/ unused products:	Recycle if possible. Dispose in accordance with local regulations.
EWC waste disposal number:	Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with regional waste company.

14. TRANSPORT INFORMATION

Transport Classification:	Not regulated as hazardous for shipment, unless noted below, under current transportation regulations.
ADR/RID/AND	Not regulated
IMDG	Not regulated
ICAO-TI/IATA	Not regulated
USA DOT	Not regulated
USA DOT/IMO	Not regulated

15. REGULATORY INFORMATION

EU Regulations: Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances	Annex I, part 1 + 2: not mentioned. With regard to possible decomposition products, see Section 10.
National Regulations TSCA (USA) EINECS (Europe)	Listed* Listed
REACH Information	Pre-registered
RoHS EU Directive 2002/95/EC:	In compliance. Does not intentionally contain banned chemicals.

* "Listed" means all chemical components are on respective inventory list and/or a qualifying exemption exists for one or more components. "Not listed" indicates that one or more components is restricted into that country or region.

16. OTHER INFORMATION

Arichem KSS-FR is a trademark of Arichem LLC.

MSDS Scope: This document conforms to Regulation EC No 1907/2006 REACH
This document is applicable to other countries and regions.

Prepared by: Arichem LLC

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