MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT and COMPANY IDENTIFICATION

Arch Chemicals, Inc.

For MSDS Questions: 1-800-511-MSDS Emergency telephone: (800) 654-6911

For a transport accident or leak, fire or major spill, call CHEMICAL EMERGENCY RESPONSE CENTER (800) 424-9300.

Rev: A

PC:

Material Name: Iron UDV Product Name: Iron, UDV

Read the entire MSDS for a complete hazard assessment.

SECTION 2: COMPOSITION/INFORMATION on INGREDIENTS*

CAS Number	% Conc ⁺	Ingredient Name
007681-57-4	40.0	Sodium metabisulfite
Proprietary	35.0	Proprietary Ingredients
007775-14-6	< 20.0	Sodium hydrosulfite

^{*}Ingredients not precisely identified are either proprietary or nonhazardous. Values are not product specifications. *Percent concentration by weight.

SECTION 3: HAZARDS IDENTIFICATION*

*As defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. See Section 8 for exposure guidelines & Section 11 for toxicology and ingredient specific information.

WHITE POWDER. NO ODOR.

GASTROINTESTINAL IRRITATION.

RESPIRATORY IRRITANT.

SEVERE EYE IRRITANT. SKIN IRRITANT.

POTENTIAL HEALTH HAZARDS

Eye: This product contains a component(s) which is severe eye

irritant based on animal studies.

Skin: This product contains a component(s) which is skin

irritant.

Inhalation: Particulates of this material will probably irritate eyes,

nose, and respiratory passages.

Ingestion: In humans, irritation of the mouth, pharynx, esophagus, and

stomach can develop following ingestion of this material.

SECTION 4: FIRST AID MEASURES

General First Aid Procedures

Eyes:

Immediately flush with plenty of water for at least 15 minutes. If redness, itching, or a burning sensation develops, have eyes examined and treated by medical personnel.

Skin:

Remove contaminated clothing and footwear while under a safety shower. Wash off of skin with plenty of soap and water. Get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

Ingestion:

DO NOT INDUCE VOMITING. Give one or two glasses of water to drink and refer to medical personnel or take direction from either a physician or a poison control center. Never give anything by mouth to an unconscious person.

Inhalation:

Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is labored, give oxygen. Consult medical personnel.

Note to Physician:

Product may decompose exothermically at elevated temperatures and cause thermal burns.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Flash Point: Not applicable

Upper Flammability Limit (UEL): No Data Lower Flammability Limit (LEL): No Data Autoignition Temperature: No Data

Products of combustion:

Combustion products: Carbon oxides, nitrogen oxides, sulfur oxides and sodium oxide.

Extinguishing media:

Carbon dioxide, dry chemical, halogenated agents. Do not use water because of reactivity.

Fire fighting instructions:

Wear self-contained breathing apparatus with full facepiece and protective clothing.

Unusual fire and explosion hazards:

Reacts with water and humid air.

Possible toxic smoke, vapors, fallout and runoff water can result from fires depending on extent of combustion and presence of other combustible materials. Contaminated buildings, areas, and equipment must be properly decontaminated before reuse.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill procedures:

work area.

Ventilate spill area.

Wear skin, eye, and respiratory protection during cleanup.

Protect from contact with water.

Recover material into a chemical waste container. Do not mix or contaminate with incompatible materials. Cover container and remove from

Keep out of sewers and drains.

Product may decompose exothermically at elevated temperatures. If product is decomposing do not handle product.

SECTION 7: HANDLING and STORAGE

Handling:

May decompose in the presence of air or moisture to liberate sulfur dioxide.

Avoid breathing particulates.

Prevent skin and eye contact.

Observe recommended exposure limits.

Storage:

Store away from oxidizers.

Protect from contact with water or humid air.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure quidelines:

No ACGIH TLV or OSHA PEL is assigned to this mixture. Control of exposure to below the PEL for the ingredients may not be sufficient. Minimize exposure in accordance with good hygiene practice. The ACGIH TLV for sodium metabisulfite is 5 mg/m3, 8-hour TWA.

Engineering controls:

Use permitted ventilation adequate to maintain safe levels.

PROTECTIVE EQUIPMENT

Respiratory protection:

Use NIOSH certified full facepiece respirator for dusts where exposure to the dust may occur.

Protective clothing:

Gloves, arm covers and apron determined to be impervious under the conditions of use.

Eye protection:

Chemical tight goggles and full faceshield.

Other

Eyewash station and safety shower in work area.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

Physical State: Powder

Appearance: White

Odor: None

Odor Threshold: No Data Boiling Point: No Data

Decomposition Temperature: 150°F, 66°C

Melting Point: No Data

Vapor Pressure (mm Hg at 20°C): No Data

Vapor Density (air = 1): No Data

Solubility in Water: Soluble Solubility in Other: No Data

Octanol/Water Partition Coefficient: No Data

pH: ~ 2.01 (aqueous slurry) Specific Gravity: No Data

Bulk Density: No Data % Volatile by Volume: No Data

VOC (%): No Data Viscosity: No Data

SECTION 10: STABILITY and REACTIVITY

Chemical Stability

Stable under normal conditions.

Decomposes on contact with moisture or water.

Conditions to avoid:

May decompose in the presence of moisture, high temperature, or oxidizers releasing sulfur dioxide gas.

Incompatibility:

Alkaline materials.

Water.

Attacks mild steel.

Moisture, heat, flame, strong oxidizers, acids, metals, air, sodium chlorite.

Hazardous polymerization:

Not known to occur.

Hazardous decomposition products:

Carbon oxides, nitrogen oxides, sulfur oxides and sodium oxide.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENT SPECIFIC TOXICITY:

PROPRIETARY INGREDIENT:

Rats were orally dosed 50 mg/kg for 14 consecutive days and developed anemia; no other adverse effects were seen.

SODIUM METABISULFITE:

Ingestion: Sodium metabisulfite (if accidentally ingested) has caused allergic reactions (asthmatic responses) in individuals that are sensitive. Inhalation: Occupational asthma has occurred in workers sensitive to being exposed to sulfites.

MSDS (continued) Iron UDV

Regulated carcinogen(s):

This product contains no components present at concentrations equal to or greater than 0.1% listed by IARC, OSHA, NTP or ACGIH as a carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

No Data

Environmental fate:

No Data

Other:

No Data

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal method:

Aqueous solutions may have a pH of less than 2 and are therefore hazardous wastes under RCRA. Dispose of these wastes in a facility permitted for hazardous waste.

Container disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residue. Puncture or otherwise destroy empty container and dispose of in a facility permitted for nonhazardous waste.

SECTION 14: TRANSPORT INFORMATION

Not regulated by the US DOT.

SECTION 15: REGULATORY INFORMATION

TSCA (Toxic Substances Control Act):

All ingredients are on the TSCA Chemical Substances Inventory.

SARA Title III (Emergency Planning and Community Right-To-Know Act):

313 Reportable ingredients:

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

California Proposition 65:

This product is not known to contain any chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

Canadian Regulations:

CEPA (Canadian Environmental Protection Act): All ingredients NOT confirmed on the DSL (Domestic Substances list).

WHMIS Classifications:

Class D, Division 2B, Toxic.

SECTION 16: OTHER INFORMATION

We assigned NFPA and HMIS ratings to this product based on the hazards of its ingredient(s). Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product MSDS.*

NFPA Rating:
Health: 2
Fire: 1
Reactivity: 1

HMIS Rating:

Special:

Health: 2 Chronic Effect

Fire: 1
Reactivity: 1

**Personal Protection: No Data

*This information is intended solely for the use of individuals trained in the particular hazard rating system.

**See appropriate MSDS section.

Revision status: Version number: 0015

MSDS Version date: 12/17/98

Revision: No Data

Issue date: 12/17/98

Revision:

The information herein is given in good faith but no warranty, expressed or implied, is made.

Prepared by: TLW/EL
Approved by: TW/KRB/RH
Approval date: 12/17/98

THE PRODUCT NAMES LISTED ARE TRADEMARKS OF ARCH CHEMICALS, INC. OR ITS AFFILIATED COMPANIES.

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This MSDS was prepared by the Safety, Health and Environment Group of at 501 Merritt, Norwalk, CT 06856. For further questions, call during regular business hours at 1-800-511-MSDS.