

## MATERIAL SAFETY DATA SHEET

### *Potassium PERSULFATE*

THIS MATERIAL SAFETY DATA SHEET PROVIDED AS A GUIDE TO THE USER  
PLEASE READ ENTIRE MSDS BEFORE USING THIS PRODUCT  
PLEASE CONTACT THE TECHNICAL ASSISTANCE NUMBER FOR ANY ADDITIONAL INFORMATION  
ALWAYS FOLLOW YOUR COMPANIES HEALTH AND SAFETY PLAN BEFORE WORKING WITH  
THIS PRODUCT OR ANY OTHER CHEMICAL. ALWAYS WEAR THE APPROPRIATE SAFETY GEAR  
WHEN WORKING WITH OR AROUND CHEMICALS.

**Product Name:**  
**POTASSIUM PERSULFATE**  
**THIS MATERIAL IS MANUFACTURED BY**  
**San Yuan Chemical Co.,Ltd.**  
**Chia Yi, Taiwan**  
**AND DISTRIBUTED BY:**  
**Ayers International Corp.**  
**Greenwich, Ct.**

LAST REVISION DATE: 12/1/2008 11:03 AM  
24 HOUR EMERGENCY RESPONSE: 1 800 424 9300

### **SECTION I IDENTIFICATION**

**PRODUCT NAME: POTASSIUM PERSULFATE**  
**CHEMICAL FAMILY: Persulfate Salt**  
**FORMULA: K<sub>2</sub>S<sub>2</sub>O<sub>8</sub>**

### **SECTION II – HAZARDOUS INGREDIENTS COMPOSITION**

**HAZARDOUS INGREDIENT CAS NO. PEL IDL PERCENT**  
**Potassium PERSULFATE 7727-21-1 >98%**

### **SECTION III – HAZARD - PHYSICAL DATA -**

**APPEARANCE: WHITE CRYSTALS POWDER, ODORLESS**  
**PHYSICAL FORM: CRYSTALS**  
**COLOR: WHITE**  
**UEL/LEL: N/D**  
**VAPOR PRESSURE: N/D**  
**MELTING POINT: DECOMPOSED AT 292 DEG C**  
**SOLUBILITY IN WATER: 70.2G/100G \_ AQUA AT 20 DEG C**  
**EVAPORATION RATE: N/A**  
**SPECIFIC GRAVITY: 2.549 MOLECULAR WEIGHT: 238.1**

### **POTASSIUM PERSULFATE**

**WARNING: OXIDIZER**  
**AIRBORNE DUST MAY IRRITATE EYES, SKIN AND MUCOUS**  
**MEMBRANES UPON CONTACT. CONTINUOUS CONTACT MAY**  
**PRODUCE SKIN DERMATITIS. INHALATION OF AIRBORNE DUST**  
**AT HIGH LEVELS MAY PRODUCE SHORTNESS OF BREATH IN**

**ALLERGIC PERSONS.  
THIS MATERIAL SHOULD ONLY BE HANDLED BY PROPERLY  
TRAINED PERSONEL WITH PROPER PROTECTIVE CLOTHING AND  
RESPIRATORY EQUIPMENT. UN PROTECTED EXPOSURE MAY BE  
HARMFUL.**

***SECTION IV – FIRST AID***

**CAUTION SHOULD BE USED TO AVOID CROSS EXPOSURE WHEN  
TREATING EXPOSURE VICTIMS. THIS MATERIAL CAN BE HARMFUL  
FROM EXPOSURE TO EYES, SKIN, INGESTION OR INHALATION.**

**IF SAFE TO DO SO MOVE VICTIM TO FRESH AIR, HAVE THEM LIE DOWN  
AND TRY TO CONTROL THEIR LEVEL OF EXERTION TO KEEP THEM  
CALM AND BREATHING AS NORMAL AS POSSIBLE. REMOVE  
CONTAMINATED CLOTHING.**

***EYES:* IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT  
LEAST 15 MINUTES. CALL A PHYSICIAN**

***SKIN:* IN CASE OF CONTACT, WASH WITH SOAP AND WATER AFTER  
EXCESSIVE CONTACT**

***INHALATION:* IF INHALED, MOVE TO FRESH AIR. IF NOT BREATHING,  
GIVE ARTIFICIAL RESPIRATION, PREFERABLY, MOUTH TO MOUTH.**

**IF BREATHING IS DIFFICULT, GIVE OXYGEN AND CALL A PHYSICIAN.**

***INGESTION:* IF SWALLOWED, GIVE VICTIM A GLASS OF WATER AND  
INDUCE VOMITING UNDER THE INSTRUCTION OF PHYSICIAN.**

- NOTE: MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE MAY  
BE CONJUNCTIVITIS OF EYES, ECZEMA OF THE SKIN, DERMATITIS,  
ASTHMA AND RESPIRATORY DISEASES.**

***SECTION V – FIRE AND EXPLOSION DATA***

**FLASHPOINT: INCOMBUSTIBLE**

**AUTOIGNITION TETOLERANCE N/D EXTINGUISHING MEDIA: USE WATER,  
DRY POWDER, CARBON DIOXIDE, AND OTHER INERT MATERIALS.**

***POTASSIUM PERSULFATE***

**FIRE FIGHTING INSTRUCTIONS:**

**EVACUATE PERSONAL TO A SAFETY AREA. IF SMOKE AND  
FUMES CAN NOT BE AVOIDED, USE PROXIMITY SUIT AND  
SELFCONTAINED BREATHING APPARATUS.**

***SECTION VI ACCIDENTAL RELEASE MEASURES***

**SWEEP UP, PLACE IN DRUM LINED WITH ACID RESISTANT MATERIALS  
AND RINSE THE AREA WITH WATER. AVOID CONTACT WITH  
COMBUSTIBLE MATERIALS.**

**SEE SECTIONS 13-14-15 FOR ADDITIONAL INFORMATION**

***SECTION VII – HANDLING – STORAGE - REACTIVITY DATA***

**HANDLING: USE ONLY WITH ADEQUATE VENTILATION (GENERAL AND/OR LOCAL) IN ORDER TO MINIMIZE AIRBORNE CONCENTRATIONS IN WORKSHOPS. WEAR RESPIRATORY PROTECTION IF VENTILATION IS INADEQUATE OR NOT AVAILABLE. USE EYE AND SKIN PROTECTION. USE CLEAN PLASTIC OR STAINLESS STEEL SCOOPS ONLY.**  
**STORAGE: STORE IN COOL DRY PLACE AND AWAY FROM FLAMMABLE MATERIALS IN TIGHTLY SEALED CONTAINERS. AVOID MOISTURE AND/OR CONTAMINATION SUCH AS RUST.**

***SECTION VIII – EXPOSURE - HEALTH DATA – PERSONAL PROTECTION***

**EXPOSURE LIMITS: CHEMICAL NAME: POTASSIUM PERSULFATE  
TWA(ACGIH) 0.1 MG/M3  
IF EYES: MAY CAUSE IRRITATION  
IF SKIN: MAY CAUSE IRRITATION  
IF INHALED: MAY CAUSE IRRITATION TO THE RESPIRATORY TRACT.  
IF INGESTED: MAY BE HARMFUL  
RESPIRATOR PROTECTION: RESPIRATORS WITH FILTERS ARE RECOMMENDED.  
SKIN PROTECTION: WEAR RUBBER GLOVES AND PROTECTIVE GEAR  
EYE PROTECTION: WEAR GOGGLES OR GLASSES WITH SIDE SHIELDS**

***SECTION VIII – PHYSICAL AND CHEMICAL PROPERTIES***

**FORM: CRYSTALS  
ODOR: NONE  
THRESHOLD LIMIT VALUE: N/D  
AIRBORNE EXPOSURE LIMITS = N/D**

***POTASSIUM PERSULFATE***

**HEALTH HAZARDS: AVOID EXPOSURE – AIRBORNE DUST MAY IRRITATE EYES, SKIN AND MUCOUS MEMBRANES UPON CONTACT. CONTINUOUS CONTACT MAY PRODUCE SKIN DERMATITIS. INHALATION OF AIRBORNE DUST AT HIGH LEVELS MAY PRODUCE SHORTNESS OF BREATH IN ALLERGIC PERSONS.  
ROUTES OF ENTRY: EYES, SKIN, INHALATION  
INHALATION: MAY BE HARMFUL, IRRITANT TO RESPIRATORY TRACT  
INGESTION: MAY BE HARMFUL  
SKIN (DERMAL): MAY BE HARMFUL, MAY CAUSE IRRITATION  
EYES: MAY BE HARMFUL, MAY CAUSE IRRITATION  
OVER EXPOSURE EFFECTS: SEEK MEDICAL ATTENTION  
HMIS HEALTH 3  
HMIS FLAMMABILITY 0  
HMIS REACTIVITY 1  
HMIS OTHER X  
TSCAT STATUS: HAZARDOUS WASTE**

**ALL MATERIALS IN THIS PRODUCT ARE PRODUCED IN COMPLIANCE WITH PUBLIC LAW 94-469, (ALSO KNOWN AS THE "TOXIC SUBSTANCES CONTROL ACT OF 1976)**

***SECTION X – STABILITY AND REACTIVITY***

**STABILITY: STABLE  
CONDITIONS TO AVOID: DECOMPOSES WHEN STORED UNDER CONDITIONS OF EXCESSIVE HEAT AND/OR MOISTURE, GENERATING HEAT AND CAUSING THE RELEASE OF OXIDES AND SULFURIC ACID AND OXYGEN WHICH SUPPORTS COMBUSTION.  
INCOMPATIBILITY: REACTS WITH ACIDS, ALKALIS, HEAVY METALS AND REDUCTIONS TO RELEASE OXYGEN.  
HAZARDOUS DECOMPOSITION: OXIEDS OR SULFURIC ACID AND OXYGEN WHICH SUPPORTS COMBUSTION  
POLYMERIZATION: WILL NOT OCCUR**

***SECTION XI – TOXICOLOGICAL INFORMATION***

**HEALTH EFFECTS: AIRBORNE DUST MAY IRRITATE EYES, SKIN AND MUCOUS MEMBRANES UPON CONTACT.  
ORAL-RAT: LD50 475MG/KG  
INTRAVENOUS-RABBIT: LDLO 178MG/KG  
INTRAPERITONEAL-MOUSE: LD50 226MG/KG**

***POTASSIUM PERSULFATE***

***SECTION XII – ECOLOGICAL INFORMATION***

**FISH TOXICITY: NO FISH TOXICITY IS KNOWN.  
SECTION XIII – DISPOSAL INFORMATION  
US EPA RCRA STATUS HAZARDOUS WASTE  
DISPOSAL METHOD: DISPOSE AS HAZARDOUS WASTE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.**

***SECTION XIV - TRANSPORTATION INFORMATION***

**PROPER SHIPPING NAME: POTASSIUM PERSULFATE  
HAZARD CLASS: CLASS 5.1  
UN OR ID NUMBER: UN 1492  
PACKING GROUP: PG III  
NORTH AMERICAN EMERGENCY RESPONSE GUIDE NO: 140  
ALWAYS CONSULT MODE SPECIFIC REGULATIONS BEFORE SHIPPING THIS MATERIAL BY HIGHWAY, RAIL, AIR, OR OCEAN  
FOR ASSISTANCE CONTACT [larry@dangerousgoods.com](mailto:larry@dangerousgoods.com)  
PACKAGINGS BULK AND NON-BULK  
REPORTABLE QUANTITY N/D  
TRADE NAME: POTASSIUM PERSULFATE  
SYNONYMS: N/D  
SIGNAL WORD: OXIDIZER**

**SECTION XV - REGULATORY INFORMATION**

ALL COMPONENTS ARE IN COMPLIANCE WITH THE FOLLOWING REGULATORY AGENCIES: USA – TSCA / CANADIAN DSL / EU EINECS / JAPANESE ENCS KOREA/CANADIAN  
ACGIH 2000 – SHORT TERM EXPOSURE LEVELS  
CANADA – WHMIS – INGREDIANT DISCLOSURE  
CERCLA/SARA – HAZ SUBSTANCES & THEIR RQ  
INVENTORY-CANADA-DOMESTIC SUBSTANCE LIST  
INVENTORY- EUROPEAN EINECS INVENTORY  
INVENTORY – JAPAN – (ENCS)  
INVENTORY- KOREA – EXISTING AND EVALUATED  
INVENTORY-TSCA-SECT 8(b) INVENTORY

**POTASSIUM PERSULFATE**

MASSACHUSETTS-RIGHT TO KNOW LIST  
NEW JERSEY- DEPARTMENT OF HEALTH RTK LIST  
NEW JERSEY- SPECIAL HAZARDOUS SUBSTANCES  
OSHA – FINAL PELs- TIME WEIGHTED AVERAGES  
PENNSYLVANIA RIGHT TO KNOW LIST  
TSCA-SECT 12(b)- EXPORT NOTIFICATION  
SARA HAZARD NOTIFICATION  
TITLE III CLASSIFICATION SECTION 311,312  
ACUTE N/D  
CHRONIC N/D  
FIRE N/D  
REACTIVITY YES – COMBUSTIBLE MATERIALS  
SUDDEN RELEASE OF PRESSURE N/D  
REPORTABLE QUANTITY N/D  
IF REGULATED UNDER CERCLA ANY MATERIAL RELEASED IN EXCESS OF THE REPORTABLE QUANTITY IN A SINGLE 24 HOUR PERIOD MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER IN THE USA AT 1 800 424 8802 OR AT THE LOCAL NUMBER OF 1 202 426 2675.  
THIS PRODUCT HAS BEEN REVIEWED AND CLASSIFIED IF REQUIRED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATION AND THIS MSDS WILL CONTAIN ALL REQUIRED INFORMATION BY THE CANADIAN CONTROLLED PRODUCTS REGULATIONS  
SECTION XI PROVIDES HEALTH & SAFETY INFORMATION  
SECTION XIII PROVIDES ENVIRONMENTAL INFORMATION

SECTION XIV PROVIDES TRANSPORTATION INFORMATION  
SECTION XVI OTHER  
THIS PRODUCTS HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON INFORMATION CURRENTLY AVAILABLE TO US AND IS BELIEVED TO BE ACCURATE. PLEASE BE ADVISED THAT NO GUARANTEE OR WARRANTY IS PROVIDED OR IMPLIED BY THE COMPANY, ITS EMPLOYEES, ITS AGENTS, DISTRIBUTORS, OR THE PREPARER OF THIS MSDS IN THIS RESPECT.

*POTASSIUM PERSULFATE*

SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USERS RESPONSIBILITY TO DETERMINE THE CONDITIONS OF SAFE USE. SUCH CONDITIONS MUST COMPLY WITH ALL GOVERNMENTAL REGULATIONS. ALL MATERIALS IN THIS PRODUCT ARE PRODUCED IN COMPLIANCE WITH PUBLIC LAW 94-469 (ALSO KNOWN AS THE TOXIC SUBSTANCE CONTROLACT” OF 1976).  
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FOOTNOTES. N/A = NOT APPLICABLE N/D = NO DATA  
< = LESS THAN > = GREATER THAN  
APP. = APPROXIMATE EST. = ESTIMATE  
FOR TECHNICAL ASSISTANT PLEASE CONTACT **AYERS INTERNATIONAL CORPORATION**

AT:

**125 Barn Hill Rd  
Greenwich, Ct. 06831  
203-329-8919**

THIS DOCUMENT PREPARED BY:  
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