Chem-Impex International Inc.

Tel: (630) 766-2112
E-mail: sales@chemimpex.com
Shipping and Correspondence:
935 Dillon Drive
Wood Dale, IL 60191 USA

Fax: (630) 766-2218
Web site: www.chemimpex.com
Manufacturing site:
825 Dillon Drive
Wood Dale, IL 60191 USA

SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 36671

NAME: Sodium metasilicate pentahydrate

SYNONYMS:

24 HOUR EMERGENCY

TELEPHONE:

(800) 535-5053(USA)

352-323-3500 (INTERNATIONAL)

TO REQUEST AN MSDS: (800) 869-9290

CUSTOMER SERVICE:

(630) 766-2112

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)

CORROSIVE TO METALS (CATEGORY 1), H290 SKIN CORROSION (CATEGORY 1B), H314 SERIOUS EYE DAMAGE (CATEGORY 1), H318 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3), RESPIRATORY SYSTEM, H335

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM

SIGNAL WORD DANGER

HAZARD STATEMENT(S)

H290 MAY BE CORROSIVE TO METALS.

H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

H335 MAY CAUSE RESPIRATORY IRRITATION.

PRECAUTIONARY STATEMENT(S)

P234 KEEP ONLY IN ORIGINAL CONTAINER. P260 DO NOT BREATHE DUST OR MIST.

P264 WASH SKIN THOROUGHLY AFTER HANDLING.
P271 USE ONLY OUTDOORS OR IN A WELL-VENTILATED

AREA.

P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/

EYE PROTECTION/ FACE PROTECTION.

P301 + P330 + P331 IF SWALLOWED: RINSE MOUTH, DO NOT INDUCE

VOMITING.

P303 + P361 + P353 IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF

IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE

SKIN WITH WATER/ SHOWER.

P304 + P340 + P310 IF INHALED: REMOVE PERSON TO FRESH AIR AND

KEEP COMFORTABLE FOR BREATHING. IMMEDIATELY

CALL A POISON CENTER/DOCTOR.

P305 + P351 + P338 + P310 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR

SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. IMMEDIATELY CALL A POISON CENTER/DOCTOR.

P363 WASH CONTAMINATED CLOTHING BEFORE REUSE. P390 ABSORB SPILLAGE TO PREVENT MATERIAL DAMAGE.

P403 + P233 STORE IN A WELL-VENTILATED PLACE. KEEP

CONTAINER TIGHTLY CLOSED.

P405 STORE LOCKED UP.

P406 STORE IN CORROSIVE RESISTANT CONTAINER WITH A

RESISTANT INNER LINER.

P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED

WASTE DISPOSAL PLANT.

HAZARDS NOT NONE

OTHERWISE

CLASSIFIED (HNOC) OR NOT COVERED BY GHS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: $Na_2SiO_3 \cdot 5H_2O$

MW: 212.14

CAS-NO. 10213-79-3

PURITY: Na2O: 28.80 - 29.80 % (Assay)

SiO2: 27.90 - 28.90% (Assay)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
Sodium metasilicate pentahydrate		
	MET. CORR. 1; SKIN CORR. 1B;	<= 100 %
	EYE DAM. 1; STOT SE 3; H290,	
	H314, H318, H335	
	CONCENTRATION LIMITS:	
	>= 20 %: STOT SE 3, H335	

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

SECTION 4. FIRST-AID MEASURES

CONTACT

DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA

SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT

OF DANGEROUS AREA.

IF INHALED IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF

NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

CONSULT A PHYSICIAN.

IN CASE OF SKIN TAKE OFF CONTAMINATED CLOTHING AND SHOES

IMMEDIATELY. WASH OFF WITH SOAP AND PLENTY OF

WATER. CONSULT A PHYSICIAN.

IN CASE OF EYE RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT

CONTACT LEAST 15 MINUTES AND CONSULT A

PHYSICIAN.CONTINUE RINSING EYES DURING

TRANSPORT TO HOSPITAL.

IF SWALLOWED DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING

BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE

MOUTH WITH WATER. CONSULT A PHYSICIAN.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE

SECTION 2.2) AND/OR IN SECTION 11

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY

EXTINGUISHING MEDIA CHEMICAL OR CARBON DIOXIDE.

SPECIAL HAZARDS SODIUM OXIDES, SILICON OXIDES

ARISING FROM THE

SUBSTANCE OR MIXTURE

ADVICE FOR WEAR SELF CONTAINED BREATHING APPARATUS FOR

FIREFIGHTERS FIRE FIGHTING IF NECESSARY.

FURTHER INFORMATION NO DATA AVAILABLE

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONALUSE PERSONAL PROTECTIVE EQUIPMENT. AVOIDPRECAUTIONS,DUST FORMATION. AVOID BREATHING VAPOURS, MIST

PROTECTIVEOR GAS. ENSURE ADEQUATE VENTILATION.EQUIPMENT ANDEVACUATE PERSONNEL TO SAFE AREAS. AVOIDEMERICATIONEVACUATE PERSONNEL TO SAFE AREAS. AVOID

EMERGENCY BREATHING DUST.

PROCEDURES FOR PERSONAL PROTECTION SEE SECTION 8.

ENVIRONMENTAL

PRECAUTIONS

DO NOT LET PRODUCT ENTER DRAINS.

METHODS ANDPICK UP AND ARRANGE DISPOSAL WITHOUTMATERIALS FORCREATING DUST. SWEEP UP AND SHOVEL. KEEP IN

CONTAINMENT AND SUITABLE, CLOSED CONTAINERS FOR DISPOSAL. **CLEANING UP**

REFERENCE TO OTHER FOR DISPOSAL SEE SECTION 13. **SECTIONS**

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE

HANDLING

AVOID CONTACT WITH SKIN AND EYES. AVOID FORMATION OF DUST AND AEROSOLS.FURTHER PROCESSING OF SOLID MATERIALS MAY RESULT.

PROCESSING OF SOLID MATERIALS MAY RESULT IN THE FORMATION OF COMBUSTIBLE DUSTS. THE POTENTIAL FOR COMBUSTIBLE DUST FORMATION SHOULD BE TAKEN INTO CONSIDERATION BEFORE

ADDITIONAL PROCESSING OCCURS.

PROVIDE APPROPRIATE EXHAUST VENTILATION AT

PLACES WHERE DUST IS FORMED. FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND

WELL-VENTILATED PLACE.

Store at RT

SPECIFIC END USE(S)

APART FROM THE USES MENTIONED IN SECTION 1.2

NO OTHER SPECIFIC USES ARE STIPULATED

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION

FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).

SKIN PROTECTION

HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE"S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES. WASH AND DRY HANDS.

FULL CONTACT
MATERIAL: NITRILE RUBBER
MINIMUM LAYER THICKNESS: 0.11 MM
BREAK THROUGH TIME: 480 MIN
MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)

SPLASH CONTACT
MATERIAL: NITRILE RUBBER
MINIMUM LAYER THICKNESS: 0.11 MM
BREAK THROUGH TIME: 480 MIN
MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374, CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC USE SCENARIO.

BODY PROTECTION

COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

RESPIRATORY PROTECTION

WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULLFACE PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

CONTROL OF ENVIRONMENTAL EXPOSURE DO NOT LET PRODUCT ENTER DRAINS.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE White granular powder
ODOUR NO DATA AVAILABLE
ODOUR THRESHOLD NO DATA AVAILABLE
PH NO DATA AVAILABLE

MELTING

POINT/FREEZING POINT

BOILING POINT FLASH POINT

EVAPOURATION RATE NO DATA AVAILABLE FLAMMABILITY (SOLID, NO DATA AVAILABLE

GAS)

UPPER/LOWER NO DATA AVAILABLE

FLAMMABILITY OR EXPLOSIVE LIMITS

VAPOUR PRESSURE NO DATA AVAILABLE VAPOUR DENSITY NO DATA AVAILABLE

RELATIVE DENSITY

WATER SOLUBILITY NO DATA AVAILABLE PARTITION COEFFICIENT: NO DATA AVAILABLE

N- OCTANOL/WATER

AUTO-IGNITION NO DATA AVAILABLE

TEMPERATURE

DECOMPOSITION NO DATA AVAILABLE

TEMPERATURE

VISCOSITY NO DATA AVAILABLE EXPLOSIVE PROPERTIES NO DATA AVAILABLE OXIDIZING PROPERTIES NO DATA AVAILABLE

OTHER SAFETY INFORMATION

NO DATA AVAILABLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY NO DATA AVAILABLE

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE

CONDITIONS.

POSSIBILITY OF HAZARDOUS

HAZARDOUS REACTIONS NO DATA AVAILABLE

CONDITIONS TO AVOID NO DATA AVAILABLE

INCOMPATIBLE MATERIALS

NO DATA AVAILABLE

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - SODIUM OXIDES, SILICON

OXIDES

OTHER DECOMPOSITION PRODUCTS - NO DATA

AVAILABLE

IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY NO DATA AVAILABLE

SKIN - RABBIT

CORROSION/IRRITATION RESULT: CAUSES BURNS. (OECD TEST GUIDELINE 404)

SERIOUS EYE EYES - RABBIT

DAMAGE/EYE IRRITATION RESULT: CAUSES BURNS.

REMARKS: (EXTERNAL MSDS)

CAUSES SERIOUS EYE DAMAGE. RISK OF

BLINDNESS!

RESPIRATORY OR SKIN

SENSITISATION

NO DATA AVAILABLE

GERM CELL AMES TEST

MUTAGENICITY RESULT: NEGATIVE

(ANHYDROUS SUBSTANCE)

CARCINOGENICITY

IARC: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC.

NTP: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED

CARCINOGEN BY NTP.

OSHA: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.

REPRODUCTIVE TOXICITY NO DATA AVAILABLE

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE MAY CAUSE RESPIRATORY IRRITATION.
ACUTE ORAL TOXICITY - IF INGESTED, SEVERE
BURNS OF THE MOUTH AND THROAT, AS WELL AS A
DANGER OF PERFORATION OF THE OESOPHAGUS

AND THE STOMACH.

ACUTE INHALATION TOXICITY - MUCOSAL IRRITATIONS, COUGH, SHORTNESS OF BREATH, POSSIBLE DAMAGES: DAMAGE OF RESPIRATORY

TRACT

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE NO DATA AVAILABLE

ASPIRATION HAZARD No

NO DATA AVAILABLE

ADDITIONAL INFORMATION

RTECS: VV9287500

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE

NOT BEEN THOROUGHLY INVESTIGATED.

QUANTITATIVE DATA ON THE TOXICITY OF THIS

PRODUCT ARE NOT AVAILABLE.

FURTHER DATA:

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL

HYGIENE AND SAFETY PRACTICE.

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY

TOXICITY TO FISH LC50 - DANIO RERIO (ZEBRA FISH) - 210 MG/L - 96 H

REMARKS: (EXTERNAL MSDS)

TOXICITY TO DAPHNIA AND

EC50 - DAPHNIA MAGNA (WATER FLEA) - 216 MG/L -

96 H

OTHER AQUATIC

REMARKS: (EXTERNAL MSDS)

INVERTEBRATES TOXICITY TO BACTERIA

ECO - PSEUDOMONAS PUTIDA - > 1,000 MG/L - 30 MIN

(OECD TEST GUIDELINE 209)

REMARKS: (ANHYDROUS SUBSTANCE)

PERSISTENCE AND DEGRADABILITY

NO DATA AVAILABLE

BIOACCUMULATIVE

POTENTIAL

NO DATA AVAILABLE

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT AND PBT/VPVB ASSESSMENT NOT AVAILABLE AS

VPVB ASSESSMENT CHEMICAL SAFETY ASSESSMENT NOT

REQUIRED/NOT CONDUCTED

OTHER ADVERSE EFFECTS BIOLOGICAL EFFECTS:

HARMFUL EFFECT DUE TO PH SHIFT. FURTHER INFORMATION ON ECOLOGY

DISCHARGE INTO THE ENVIRONMENT MUST BE

AVOIDED.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT CONTACT A LICENSED PROFESSIONAL WASTE

DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL.

DISSOLVE OR MIX THE MATERIAL WITH A

COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENSED DISPOSAL COMPANY.

CONTAMINATED PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: DISODIUM TRIOXOSILICATE

UN NUMBER: 3253 CLASS: 8 PACKING GROUP: III

REPORTABLE QUANTITY

(RQ):

POISON INHALATION NO

HAZARD:

IMDG

PROPER SHIPPING NAME: DISODIUM TRIOXOSILICATE

UN NUMBER: 3253 CLASS: 8 PACKING GROUP: III EMS-NO: F-A, S-B

IATA

PROPER SHIPPING NAME: DISODIUM TRIOXOSILICATE

UN NUMBER: 3253

CLASS: 8 PACKING GROUP: III

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO

THE REPORTING REQUIREMENTS OF SARA TITLE III,

SECTION 302.

SARA 313 COMPONENTS THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL

COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

SARA 311/312 HAZARDS ACUTE HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Sodium metasilicate

pentahydrate

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H290 MAY BE CORROSIVE TO METALS.

H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

10213-79-3

H335 MAY CAUSE RESPIRATORY IRRITATION.

MSDS LEGEND

MW: MOLECULAR WEIGHT MF: MOLECULAR FORMULA

VOC: VOLATILE ORGANIC COMPOUNDS

ACGIH: AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL

HYGINISTS

CAS: CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

PEL: PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV: THRESHOLD LIMIT VALUE (ACGIH)

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VERSION: 3.1 REVISION DATE: 01/27/2017