

## MATERIAL SAFETY DATA SHEET ( M.S.D.S )

THE DATA GIVEN HERE IS BASED ON CURRENT KNOWLEDGE AND EXPERIENCE. THE PURPOSE OF THIS MATERIAL SAFETY DATA SHEET IS TO DESCRIBE THE PRODUCTS IN TERMS OF THEIR SAFETY REQUIREMENTS. THE DATA DOES NOT SIGNIFY ANY WARRANTY WITH REGARD TO THE PRODUCT PROPERTIES.

---

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING  
CAUSTIC SODA FLAKES 99%

---

2. COMPOSITION/INFORMATION ON INGREDIENTS; - RISK PHRASE  
CAS NO: 1310-73-2

---

### 3. HAZARDS IDENTIFICATION

EYES: CONTACT MAY CAUSE TRANSIENT EYE IRRITATION

SKIN: LOW HAZARD FOR USUAL INDUSTRIAL HANDLING

INHALATION: MAY CAUSE RESPIRATORY TRACT IRRITATION.

---

### 4. FIRST-AID MEASURES

EYES: CONTAMINATION OF THE EYES MUST BE TREATED BY THOROUGH IRRIGATION WITH WATER, WITH THE EYELIDS HELD OPEN. EVENTUALLY A DOCTOR ( OR EYE SPECIALIST) SHOULD BE CONSULTED.

SKIN: WASH SKIN WITH PLENTY OF WATER.

INHALATION: REMOVE FROM EXPOSURE TO FRESH AIR IMMEDIATELY. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

---

### 5. FIRE-FIGHTING MEASURES

GENERAL INFORMATION: DOES NOT BURN READILY. AS IN ANY FIRE, WEAR A SELF-CONTAINED BREATHING APPARATUS IN PRESSURE DEMAND. MSHA/NIOSH ( APPROVED OR EQUIVALENT), AND FULL PROTECTIVE GEAR.

EXTINGUISHING MEDIA: NO RESTRICTION.

AUTOIGNITION TEMPERATURE: NOT AVAILABLE.

FLASH POINT: NOT AVAILABLE.

EXPLOSION LIMITS: NOT AVAILABLE.

---

### 6. ACCIDENTAL RELEASE MEASURES

GENERAL INFORMATION: USE PROPER PERSONAL PROTECTIVE EQUIPMENT AS INDICATED IN EXPOSURE CONTROL/ PERSONAL PROTECTION CLAUSE.

SPILLS/LEAKS: TAKE UP MECHANICALLY, AVOID DUST FORMATION. RINSE AWAY RESIDUE WITH PLENTY OF WATER.

---

### 7. HANDING AND STORAGE

STORAGE: NON-TOXIC. PERMITTED FOOD ADDITIVE. KEEP CONTAINER DRY IN A COOL AND WELL-VENTILATED PLACE. NO SPECIAL MEASURES REQUIRED.

---

### 8. PERSONAL PROTECTION

EYES PROTECTION: WEAR APPROPRIATE PROTECTIVE EYEGLASSES OR CHEMICAL SAFETY GOGGLES AS DESCRIBED BY OSHA'S EYE AND FACE PROTECTION

SKIN PROTECTION: WEAR APPROPRIATE PROTECTIVE RUBBER GLOVES TO PREVENT SKIN EXPOSURE. AVOID PROLONGED SKIN CONTACT. WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT SKIN EXPOSURE.

RESPIRATORY PROTECTION: IF PRODUCT FORMS DUST, WEAR DUCT-PROTECTION MASK, AVOID INHALING DUST. FOLLOW THE OSHA RESPIRATOR REGULATIONS

FOUND IN 29CFR 1910. 134 OR EUROPEAN STANDARD EN 149. ALWAYS USE A NIOSH  
OR EUROPEAN STANDARD EN 149 APPROVED RESPIRATOR WHEN NECESSARY.

---

9. PHYSICAL AND CHEMICAL PROPERTIES

NAME OF COMMODITY: CAUSTIC SODA FLAKES)	SPECIFICATION(NAOH):98.0%
SAMPLING MODE:RANDOM	
STANDARD: GB/T 209-2018	INSPECTION PATTERN: LOT
TEST ITEM:NAOH, CARBONIC ACID,SODIUM CHLORIDE,OXIDIZE THE IRON	
ITEM: (OF METHOD OF ION EXCHANGE MEMBRANE)	TEST RESULT (%)
NAOH	98.2
CARBONIC ACID	0.29
SODIUM CHLORIDE	0.02
OXIDIZE THE IRON	0.001
CONCLUSION: ACCORDS WITH STANDARD OF GB/T 209-2018	
NOTES:	
SAMPLER :ZHANG XIAOMIN CODE:20200103	
INSPECTOR:ZHANG XIAOMIN CHECK:HAO ZHI	
EXAMINE:HUANG WENLI	
REMARKS:	

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.  
CONDITION TO AVOID: MAY DELIQUESCE IN THE WET AIR AND MAY LUMP UNDER A  
CERTAIN PRESSURE OR IN THE HIGH TEMPERATURE CONDITION. AFTER A LONG-  
TIME EXPOSURE IN THE OPENING ENVIRONMENT, THE MATERIAL MAY DECOMPOUNF  
AND BE YELLOWY.  
HAZARDOUS DECOMPOSITION PRODUCTS: PRODUCTS NOT DETERMINED

---

11. TOXICOLOGICAL INFORMATION

WITH MANY YEARS OF EXPERIENCE IN THE PRODUCTION AND USE OF THE  
PRODUCT NO EFFESTS DETRIMENTAL TO HEALTH ARE KNOWN.

---

12. ECOLOGICAL INFORMATION

ENGINEERING CONTROLS: USE ADEQUATE VENTILATION TO KEEP AIRBORNE  
CONCENTRATIONS LOW.

---

13. DISPOSAL CONSIDERATIONS

---

14. DECLARATION FOR LAND SHIPMENT: --

DECLARATION FOR SEA SHIPMENT: --

DECLARATION FOR SHIPMENT BY TRAIN: --

---

15. REGULATORY INFORMATION

---

16. OTHER INFORMATION

NONE

---