MATERIAL SAFETY DATA

SECTION I

MANUFACTURING NAME: Akzo Salt Inc.

ADDRESS: Abington Executive Park, Clarks Summit, PA 18411

EMERGENCY PHONE: 717-587-9241 DATE PREPARED: 01-21-91

BY: T. E. Dommer, Director of Technical

Service

CHEMICAL NAME: Sodium Chloride (salt, halite, solar salt, rock salt) FORMULA: NaCl

TRADE NAME: Sterling® Rock Salt

CHEMICAL FAMILY: Inorganic Salt (alkali metal - halogen)

SECTION II - HAZARDOUS INGREDIENTS = NONE

CAS REGISTRATION & EPA TOXIC SUBSTANCES INVENTORY NUMBER = 7647-14-5

SECTION III - PHYSICAL DATA

BOILING POINT (°C) @760 mm = 1465 VAPOR PRESSURE (mm Hg) @746.9°C = 2.4

VAPOR DENSITY = NA

SOLUBILITY IN WATER (g/100cc) = 35.7 @0°C, 36.0 @20°C

APPEARANCE & ODOR = Solid white or off-white crystalline material is odorless.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT = NONE

FLAMMABLE LIMITS = Not Flammable

EXTINGUISHING MEDIA = NA

%VOLATILE (By Volume) = NA

EVAPORATION RATE = NA

EXPLOSIVE LIMITS = Not Explosive

SPECIFIC GRAVITY (H2O = 1) = 2.165

SPECIAL/UNUSUAL FIRE FIGHTING PROCEDURES/HAZARDS = NONE/Not Combustible

NATIONAL FIRE PROTECTION ASSOCIATION CODE = 000

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUES = Rats: Oral LD $_{50}$ = 3.75 g/kg; MLD I.V. = 2.5 g/kg EFFECTS OF OVERDOSE OR OVEREXPOSURE = No acute systemic, chronic systemic or chronic local toxicity. In sensitive persons some dermal or eye irritation effects, or after excessive ingestion, edema and/or temporary elevated blood pressure effects. Gavage ingestion of 15-50 g may induce vomiting resulting in partial vacating of stomach contents.

EMERGENCY & FIRST AID PROCEDURES = Skin and eyes; Flush with water; Ingestion: High fluid intake facilitates urinary excretion and relief of edema and temporary elevated blood pressure. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE = N.A.

SECTION VI - REACTIVITY DATA

STABILITY = Stable

CONDITIONS TO AVOID = Concentrated

acids such as sulfuric or nitric.

HAZARDOUS DECOMPOSITION PRODUCTS = Hydrochloric acid from above acid mixtures with salt. HAZARDOUS POLYMERIZATION = NONE. Will not occur.

SECTION VII - SPILLS OR LEAKS PROCEDURES

STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK = Non-hazardous. DOT classification = Non-corrosive. Sweep up and flush with water.

WASTE DISPOSAL METHODS = Dry to land fill or dissolve in sufficient amounts of water to meet local existing water quality standards.

SECTION VIII - SPECIAL PROTECTION & PRECAUTIONS

VENTILATION = Local exhaust not necessary. Mechanical control dust collection may be used.

PERSONAL PROTECTIVE EQUIPMENT = Eye goggles and gloves optional and respirator unnecessary, but all may be used for comfort.

PRECAUTIONS (HANDLING/STORAGE) = Store under DRY (less than 75% R.H.) conditions to prevent CAKING of salt. Store on pallets under protective cover. Do not store cases/bags directly on damp or concrete floors.



Akzo Salt Inc.

Sterling® Rock Salt

Cleveland, OH production

Description

Sterling® Rock Salt is a coarse rock salt (Sodium Chloride) mined from bedded, underground halite deposits and, then, crushed and screened, under process control procedures, to produce a general purpose chemical. Sterling® Rock Salt is recommended for use in chemical manufacturing, textiles, metallurgical smelting, leather tanning, paper pulp processing, road stabilization, as a de-icing compound, for brine making and could also be used for water softening.

Approved Use

Sterling® Rock Salt is designed for use as an industrial chemical. Although it contains no added chemicals, Sterling® Rock Salt is not recommended for direct food applications. Sterling® Rock Salt may be used in Sterling® Brinopak®, Sterling® Brinomat® and Sterling® Lixator® salt dissolvers for brine making.

Availability

Sterling® Rock Salt is available in 50# and 80# net weight, multiwall, polylined, paper bags and in bulk.

Storage

To retard caking, Sterling® Rock Salt should be stored in a dry, covered area at relative humidities below 75%. Cycling salt through the 75% relative humidity zone will rapidly increase the onset of caking.

Technical Information

For further product information, contact the Director of Technical Service, Akzo Salt Inc., Abington Executive Park, Clarks Summit, PA 18411, by phone 717-587-9241 or FAX 717-586-7792.

Regional Sales Offices

For order, pricing, delivery or other service information, contact the Regional Sales Office nearest you:

CLARKS SUMMIT, PA	800-548-5618	FAX 717-587-5831
TOLEDO, OH (Ohio)	800-472-7020	FAX 419-882-8821
(Outside Ohio)	800-537-7043	
ATLANTA, GA	800-241-7066	FAX 404-457-8676
CHICAGO, IL (Illinois)	800-433-0919	FAX 708-297-6087
(Outside Illinois)	800-621-4293	
SALT LAKE CITY, UT	800-458-6214	FAX 801-269-0082
GROCERY PRODUCTS (US)	800-548-5615	FAX 800-544-9975
(Canada)	800-621-7622	
EXPORT	800-234-4506	FAX 203-767-7119
AKZO SALT INC.	717-587-5131	FAX 717-586-6278
		TELEX 831-872

Product data

Abington Executive Park . Clarks Summit, PA 18411

PD 7001 08-91

Properties

Chemical

Component ¹	11-2-	Typical / Range		
	Units	Minimum ²	Typical	Maximum ²
Sodium Chloride ³	%	-	96.6	-
Surface Moisture	%		0.05	0.08
Water Insolubles	%	-	0.35	1.07
Calcium ⁴	%	- 1	0.86	1.57
Sulfate ⁴	%	-	2.11	3.85
Magnesium ⁴	%	-	0.02	0.03

Physical

	Sieve Analysis ¹				
JIOO Omarina		Cumulative Percent Retained			
USS Opening Mesh Inches	Minimum ²	Typical	Maximum ²		
5/16	0.312	1	4	16	
5	0.156	-	37	-	
10	0.078	-	75	-	
18	0.039	-	97	-	
35	0.0195	95	99	100	

Other Physical and Functional

Parameter ¹	Units	Typical
Bulk Density(loose)	lb/cu ft	75
(packed)	lb/cu ft	77

(1) Analytical methods available on request. (2) Based on ± 2 standard deviations. (3) By difference of impurities, moisture free basis. (4) Water soluble.