

Distributed by  
**Rainbow Technology Corp.**  
Tel: 1.800.637.6047 / 205.733.0333  
RTC Product #7097

APR-03-2007 16:42

RAINBOW TECHNOLOGY

P.001

**DISTRIBUTED BY: RAINBOW TECHNOLOGY**  
**800.637.6047 OR 205.733.0333**  
**RTC PRODUCT NO. 7097**

005 06/04/04 SODIUM BICARBONATE

PRODUCT NAME: SODIUM BICARBONATE  
MSDS NUMBER: MZS2954  
DATE ISSUED: 6/4/2004  
SUPERSEDES: 1/6/2002  
ISSUED BY: 008614

---

---

**SODIUM BICARBONATE**

---

---

**1. PRODUCT IDENTIFICATION**

SYNONYMS: SODIUM HYDROGEN CARBONATE; SODIUM ACID CARBONATE; BAKING  
SODA; BICARBONATE OF SODA  
CAS NO: 144-55-8  
MOLECULAR WEIGHT: 84.01  
CHEMICAL FORMULA: NaHCO3  
Distributed by:  
Univar USA Inc.  
6100 Carillon Point  
Kirkland, WA 98033  
425-889-3400

---

---

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

INGREDIENT	CAS NO	PERCENT	HAZARDOUS
SODIUM BICARBONATE	144-55-8	99 - 100%	NO

---

---

**3. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

AS PART OF GOOD INDUSTRIAL AND PERSONAL HYGIENE AND SAFETY PROCEDURE, AVOID ALL UNNECESSARY EXPOSURE TO THE CHEMICAL SUBSTANCE AND ENSURE PROMPT REMOVAL FROM SKIN, EYES AND CLOTHING.

**POTENTIAL HEALTH EFFECTS**

**INHALATION:**  
HIGH CONCENTRATIONS OF DUST MAY CAUSE COUGHING AND SNEEZING.

**INGESTION:**  
EXTREMELY LARGE ORAL DOSES MAY CAUSE GASTROINTESTINAL DISTURBANCES.

**SKIN CONTACT:**  
NO ADVERSE EFFECTS EXPECTED.

**EYE CONTACT:**  
CONTACT MAY CAUSE MILD IRRITATION, REDNESS, AND PAIN.

**CHRONIC EXPOSURE:**  
NO INFORMATION FOUND.

**AGGRAVATION OF PRE-EXISTING CONDITIONS:**

# Safety Data Sheet (SDS)

APR-03-2007 16:42

RAINBOW TECHNOLOGY

P.002

NO INFORMATION FOUND.

---

---

## 4. FIRST AID MEASURES

### INHALATION:

REMOVE TO FRESH AIR. GET MEDICAL ATTENTION FOR ANY BREATHING DIFFICULTY.

### INGESTION:

GIVE SEVERAL GLASSES OF WATER TO DRINK TO DILUTE. IF LARGE AMOUNTS WERE SWALLOWED, GET MEDICAL ADVICE.

### SKIN CONTACT:

NOT EXPECTED TO REQUIRE FIRST AID MEASURES.

### EYE CONTACT:

WASH THOROUGHLY WITH RUNNING WATER. GET MEDICAL ADVICE IF IRRITATION DEVELOPS.

---

---

## 5. FIRE FIGHTING MEASURES

### FIRE:

NOT CONSIDERED TO BE A FIRE HAZARD.

### EXPLOSION:

NOT CONSIDERED TO BE AN EXPLOSION HAZARD.

### FIRE EXTINGUISHING MEDIA:

USE ANY MEANS SUITABLE FOR EXTINGUISHING SURROUNDING FIRE.

### SPECIAL INFORMATION:

USE PROTECTIVE CLOTHING AND BREATHING EQUIPMENT APPROPRIATE FOR THE SURROUNDING FIRE.

---

---

## 6. ACCIDENTAL RELEASE MEASURES

VENTILATE AREA OF LEAK OR SPILL. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT AS SPECIFIED IN SECTION 8. SPILLS: SWEEP UP AND CONTAINERIZE FOR RECLAMATION OR DISPOSAL. VACUUMING OR WET SWEEPING MAY BE USED TO AVOID DUST DISPERSAL. SMALL AMOUNTS OF RESIDUE MAY BE FLUSHED TO SEWER WITH PLENTY OF WATER.

---

---

## 7. HANDLING AND STORAGE

KEEP IN A WELL CLOSED CONTAINER STORED UNDER COLD TO WARM CONDITIONS, 2 TO 40 C, (36 TO 104F). PROTECT AGAINST PHYSICAL DAMAGE. CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTY SINCE THEY RETAIN PRODUCT RESIDUES (DUST, SOLIDS); OBSERVE ALL WARNINGS AND PRECAUTIONS LISTED FOR THE PRODUCT.

---

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS:  
NONE ESTABLISHED.

### VENTILATION SYSTEM:

IN GENERAL, DILUTION VENTILATION IS A SATISFACTORY HEALTH HAZARD CONTROL

# Safety Data Sheet (SDS)

APR-03-2007 16:42

RAINBOW TECHNOLOGY

P.003

FOR THIS SUBSTANCE. HOWEVER, IF CONDITIONS OF USE CREATE DISCOMFORT TO THE WORKER, A LOCAL EXHAUST SYSTEM SHOULD BE CONSIDERED.

#### PERSONAL RESPIRATORS (NIOSH APPROVED):

FOR CONDITIONS OF USE WHERE EXPOSURE TO DUST OR MIST IS APPARENT AND ENGINEERING CONTROLS ARE NOT FEASIBLE, A PARTICULATE RESPIRATOR (NIOSH TYPE N95 OR BETTER FILTERS) MAY BE WORN. IF OIL PARTICLES (E.G. LUBRICANTS, CUTTING FLUIDS, GLYCERINE, ETC.) ARE PRESENT, USE A NIOSH TYPE R OR P FILTER. FOR EMERGENCIES OR INSTANCES WHERE THE EXPOSURE LEVELS ARE NOT KNOWN, USE A FULL-FACE POSITIVE-PRESSURE, AIR-SUPPLIED RESPIRATOR.  
**WARNING: AIR-PURIFYING RESPIRATORS DO NOT PROTECT WORKERS IN OXYGEN-DEFICIENT ATMOSPHERES.**

#### SKIN PROTECTION:

WEAR PROTECTIVE GLOVES AND CLEAN BODY-COVERING CLOTHING.

#### EYE PROTECTION:

USE CHEMICAL SAFETY GOGGLES. MAINTAIN EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES IN WORK AREA.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### APPEARANCE:

WHITE CRYSTALLINE POWDER.

BOILING POINT:  
NOT APPLICABLE.

#### ODOR:

ODORLESS.

MELTING POINT:  
60C (140F)

#### SOLUBILITY:

7.8G/100G WATER @ 18C (64F).

VAPOR DENSITY (AIR=1):  
NO INFORMATION FOUND.

#### DENSITY:

2.2

VAPOR PRESSURE (MM HG):  
NO INFORMATION FOUND.

#### PH:

8.3 (0.1 MOLAR @ 25C (77F))

EVAPORATION RATE (BUAC=1):  
NO INFORMATION FOUND.

% VOLATILES BY VOLUME @ 21C (70F):

0

## 10. STABILITY AND REACTIVITY

#### STABILITY:

STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE.

#### HAZARDOUS DECOMPOSITION PRODUCTS:

GASEOUS CARBON DIOXIDE.

#### HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR.

#### INCOMPATIBILITIES:

REACTS WITH ACIDS TO FORM CARBON DIOXIDE. DANGEROUS REACTION WITH MONOAMMONIUM PHOSPHATE OR A SODIUM-POTASSIUM ALLOY.

#### CONDITIONS TO AVOID:

HEAT, MOISTURE, INCOMPATIBLES.

## 11. TOXICOLOGICAL INFORMATION

# Safety Data Sheet (SDS)

APR-03-2007 16:42

RAINBOW TECHNOLOGY

P.004

MG/KG. IRRITATION DATA: HUMAN, SKIN, 30MG/3D-I MILD, RABBIT, EYE, 100 MG/30 S, MILD.

-----/CANCER LISTS/-----

INGREDIENT	---NTP CARCINOGEN---		IARC CATEGORY
	KNOWN	ANTICIPATED	
SODIUM BICARBONATE (144-55-8)	NO	NO	NONE

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:  
NO INFORMATION FOUND.

ENVIRONMENTAL TOXICITY:  
NO INFORMATION FOUND.

13. DISPOSAL CONSIDERATIONS

WHATEVER CANNOT BE SAVED FOR RECOVERY OR RECYCLING SHOULD BE MANAGED IN AN APPROPRIATE AND APPROVED WASTE DISPOSAL FACILITY. PROCESSING, USE OR CONTAMINATION OF THIS PRODUCT MAY CHANGE THE WASTE MANAGEMENT OPTIONS. STATE AND LOCAL DISPOSAL REGULATIONS MAY DIFFER FROM FEDERAL DISPOSAL REGULATIONS.

DISPOSE OF CONTAINER AND UNUSED CONTENTS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS.

14. TRANSPORT INFORMATION

NOT REGULATED.

15. REGULATORY INFORMATION

-----/CHEMICAL INVENTORY STATUS - PART 1/-----

INGREDIENT	TSCA	EC	JAPAN	AUSTRALIA
SODIUM BICARBONATE (144-55-8)	YES	YES	YES	YES

-----/CHEMICAL INVENTORY STATUS - PART 2/-----

INGREDIENT	KOREA	--CANADA--		PHIL.
		DEL	NDSL	
SODIUM BICARBONATE (144-55-8)	YES	YES	NO	YES

-----/FEDERAL, STATE & INTERNATIONAL REGULATIONS - PART 1/-----

INGREDIENT	-SARA 302-		-SARA 313-	
	RQ	TPQ	LIST	CHEMICAL CATG
SODIUM BICARBONATE (144-55-8)	NO	NO	NO	NO

-----/FEDERAL, STATE & INTERNATIONAL REGULATIONS - PART 2/-----

INGREDIENT	CERCLA	-RCRA-	
		261.33	-TSCA- 8(D)
SODIUM BICARBONATE (144-55-8)	NO	NO	NO