


	DATE PREPARED:1th March, 2012
MATERIAL SAFETY DATA SHEET	MSDS NO: 0132051000-8
<u>1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</u>	
CHEMICAL PRODUCT NAME: KE-311	
NAME OF MANUFACTURER/SUPPLIER: Arakawa Chemical Industries, Ltd.	
NAME OF SECTION: Onahama Plant Quality and Environment Maintenance Section	
ADDRESS: 399-5,Simokawa-Aza-Ooturugi,Izumi-machi,Iwaki-city,Fukushima,971-8183 Japan	
TELEPHONE NUMBER: 81-2-4656-7733 FAX NUMBER: : 81-2-4656-7735	
<u>2.HAZARD IDENTIFICATION</u>	
CLASSIFICATION OF THE SUBSTANCE OR MIXTURE FOR SDS IN JAPAN :	
PHYSICAL HAZARDS	FLAMMABLE SOLIDS : Classification not possible
HEALTH HAZARDS	ACUTE TOXICITY(Oral) : Not classified
	ACUTE TOXICITY(Dermal) : Classification not possible
	ACUTE TOXICITY(Gases) : Not applicable
	ACUTE TOXICITY(Vapours) : Classification not possible
	ACUTE TOXICITY(Dusts and Mists) : Classification not possible
	SKIN CORROSION/IRRITATION : Classification not possible
	SERIOUS EYE DAMAGE/EYE IRRITATION : Classification not possible
	RESPIRATORY SENSITIZATION : Classification not possible
	SKIN SENSITIZATION : Category 1
	GERM CELL MUTAGENICITY : Classification not possible
	CARCINOGENICITY : Classification not possible
	REPRODUCTIVE TOXICITY : Classification not possible
	SPECIFIC TARGET ORGAN TOXICITY(SINGLE EXPOSURE): Classification not possible
	SPECIFIC TARGET ORGAN TOXICITY(REPEATED EXPOSURE): Classification not possible
	ASPIRATION TOXICITY : Classification not possible
ENVIRONMENT HAZARDS	AQUATIC ENVIRONMENT HAZARDS(ACUTE) : Classification not possible
	AQUATIC ENVIRONMENT HAZARDS(CHRONIC) : Classification not possible
	HAZARDOUS TO THE OZONE LAYER : Classification not possible
GHS LABEL ELEMENTS FOR SDS IN JAPAN	
HAZARD SYMBOLS:	
	
SIGNAL WORD: Warning	

HAZARD STATEMENTS: May cause an allergic skin reaction.

PRECAUTIONARY STATEMENTS:

(PREVENTION)

Avoid breathing dust, fume, gas, mist, vapours or spray.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves.

(RESPONSE)

IF ON SKIN: Wash with plenty of soap and water.

IF skin irritation or rash occurs: Get medical attention.

Wash contaminated clothing before reuse.

(DISPOSAL)

Dispose of contents or container in accordance with local, regional, national or international regulations.

OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION

PHYSICAL AND CHEMICAL HAZARDS: Flammable at extremely high temperature.

ADVERSE HUMAN HEALTH EFFECT : Vapor may cause irritation to skin, eyes and throat.

ENVIRONMENTAL EFFECTS : Not available

3.COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME: Hydrogenated Rosin Ester

SYNONYM(S):

CAS REGISTRY NUMBER: Hydrogenated Rosin Ester: Registered,

2,6-Bis(1,1-dimethylethyl)-4-methylphenol (BHT): 128-37-0

INGREDIENTS AND COMPOSITION: Hydrogenated Rosin Ester 99.8%

2,6-Bis(1,1-dimethylethyl)-4-methylphenol 0.2%

CHEMICAL FORMULA (CONSTITUTIONAL FORMULA, STRUCTURAL FORMULA):

4.FIRST-AID MEASURES

EYE CONTACT: Immediately rinse the affected eyes, including under the eyelids, with clean water for at least fifteen minutes and see a doctor.

SKIN CONTACT: Wash the affected area under tepid running water using a mild soap.

INHALATION: Move the victim immediately into fresh air. If necessary, See a doctor for proper treatment.

INGESTION: Give the victim some glasses of water and try to get the victim to vomit.
(However, do not make an unconscious person vomit.) Immediately see a doctor.

5.FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA:

Water, foam , dry chemical powder or carbon dioxide.

SPECIFIC HAZARDS WITH REGARD TO FIRE-FIGHTING MEASURES:

A lot of smoke and soot may come out.

6.ACCIDENTAL RELEASE MEASURES:

Sweep up, place in a bag and hold for waste disposal, or take up and place in closed container.

7.HANDLING AND STORAGE

HANDLING:

Handle only in the well-ventilated areas. Do not breathe dust by wearing dust respirator.

Prevent build-up of electrostatic charges (e.g. by grounding).

Wear proper protective equipment then working.

Because the product is a rosin derivative, the components are different from rosin. Therefore, it is not easy to clarify the component of rosin in the product. However, in consideration of the safety of operators, the handling corresponding to rosin is described herein.

STORAGE:

Do not store containers under high temperature.

Product should be stored in warehouse and keep them tightly closed when in no use.

8.EXPOSURE CONTROL/PERSONAL PROTECTION

CONTROL PARAMETERS: ACGIH 2 ppm (2,6-Di-tert-butyl-4-methylphenol)

RESPIRATORY PROTECTION: Filter respirator, Dust respirator

EYE PROTECTION: Safety goggles, Chemical goggles

HAND, SKIN AND BODY PROTECTION Rubber gloves, Anti-static and protective clothing.

9.PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE, FOAM: Solid

APPEARANCE: Block form

COLOR: Colorless

ODOR: Odorless

pH: Not available

RELATIVE DENSITY (DENSITY): 1.077 g/cm³ (at 20°C)

BOILING POINT : Not available

MELTING POINT : Softening point 96.5 °C

FLASH POINT: 257°C

AUTOIGNITION TEMPERATURE: Not available

UPPER AND LOWER EXPLOSION LIMIT: Not available

VAPOR PRESSURE : Not available

VAPOR DENSITY : Not available

SOLUBILITY IN WATER : Insoluble

SOLUBILITY IN ----- : Soluble in Toluene , Xylene

10. PHYSICAL HAZARD (STABILITY AND REACTIVITY)

STABILITY: Stable at normal temperature and pressures.

POSSIBILITY OF HAZARDOUS REACTIONS: Not self-reactive

CONDITION TO AVOID: Heating and high temperature

INCOMPATIBLE MATERIALS: Not available

HAZARDOUS DECOMPOSITION PRODUCTS: Not available

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: LD50 more than 15,000 mg/kg (mouse , Oral)

Chemical name	CAS No.	Acute toxicity (oral) mg/kg	Acute toxicity (dermal) mg/kg	Acute toxicity (inhalation: gas) ppmV	Acute toxicity (inhalation: vapour) mg/L or ppm	Acute toxicity (inhalation: dust, mist) mg/L or ppm
2,6-Bis(1,1-dimethyl-4-methylphenyl)phenol (BHT) ³⁾	128-37-0	1559	>2000(Rat)	Not applicable	Classification not possible	Classification not possible

SKIN CORROSION/IRRITATION: Not available

SERIOUS EYE DAMAGE/EYE IRRITATION:

Dust and vapor may irritate eye and respiratory tract. ^{1) 2)}

RESPIRATORY OR SKIN SENSITIZATION:

Repeated or prolonged contact may cause sensitization. ^{1) 2)}

A guinea pig maximization test showed no evidence of dermal sensitization (modified Kligman method).

SKIN SENSITIZATION of BHT :

There is an enrollment that sensitizing property was acknowledged by humans, although there are negative reports in test with guinea pigs. ³⁾

GERM CELL MUTAGENICITY: : Not available

CARCINOGENICITY: Not available

REPRODUCTIVE TOXICITY: Not available

SPECIFIC TARGET ORGAN TOXICITY(SINGLE OR REPEATED EXPOSURE):Not available

ASPIRATION TOXICITY: Not available

OTHER INFORMATION: Not available

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

BHT is toxic to aquatic life from 48-hour EC50=0.84mg/L of Crustacea (Daphnia magna). ³⁾

PERSISTENCE AND DEGRADABILITY:

BHT is not rapidly degrading (BOD: 4.5% (existing chemical substances safety inspections data)) ³⁾

BIOACCUMULATIVE POTENTIAL:

BHT is bioaccumulative ((BCF=2800 (existing chemical substances safety inspections data)). ³⁾

MOBILITY IN SOIL: Not available

OTHER ADVERSE EFFECTS: Not available

13.DISPOSAL CONSIDERATION

Disposing this material/ container should follow all regulations or an authorized waste collector in your country.

14.TRANSPORT INFORMATION

Keep away from direct sunlight and contact with water. Keep the material from overturn, fall-down and any other damage.

UN CLASS: Not applicable

UN NO: Not applicable

15.REGULATORY INFORMATION

Arakawa Chemical Industries, Ltd. is not able to check up the regulatory information in regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

16.OTHER INFORMATION

REFERENCES:

- 1) Journal of Occupational Health (Japan Society for Occupational Health) , Vol.40, No.4 (1998)
- 2) 1999 TLV and BEIs (ACGIH)
- 3) GHS Classification Data from NITE (National Institute of Technology and Evaluation) Web Site
http://www.safe.nite.go.jp/english/ghs_index.html

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