

	DATE PREPARED: 6th September 2011
MATERIAL SAFETY DATA SHEET	MSDS NO: 0457512001-4
<u>1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</u>	
CHEMICAL PRODUCT NAME: KR-610	
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 : Classification not possible	
GHS LABEL ELEMENTS FOR SDS IN JAPAN	
HAZARD SYMBOLS: Classification not possible	
SIGNAL WORD: Classification not possible	
HAZARD STATEMENTS: Classification not possible	
PRECAUTIONARY STATEMENTS:	
Avoid contact with eyes and skin.	
Wear suitable respiratory, eyes and skin protection equipment.	
Get medical attention immediately when required first-aid measures.	
Wash hands with water and soap thoroughly after use.	
Keep container tightly closed.	
Disposing of this material/ container according to local 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	
<u>3.COMPOSITION/INFORMATION ON INGREDIENTS</u>	
CHEMICAL NAME: Hydrogenated rosin	
SYNONYM(S):	
CAS REGISTRY NUMBER: Registered	
INGREDIENTS AND COMPOSITION: Hydrogenated rosin 100 %	
CHEMICAL FORMULA (CONSTITUTIONAL FORMULA, STRUCTURAL FORMULA):	
<u>4.FIRST-AID MEASURES</u>	
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 mild soap.	
INHALATION: Move the victim immediately into fresh air, and keep the victim warm and quiet.	
Immediately 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 spray or dry chemical powder.

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 when working.
Avoid contact with eyes and skin. Avoid inhaling dust and fumes.

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 contains 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:

Not established

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

COLOR: Pale yellow - Colorless

ODOR: Odorless

pH: Not applicable

RELATIVE DENSITY (DENSITY): 1.059g/cm³(at20°C)

BOILING POINT : Not available

MELTING POINT : Softening point 86 °C
FLASH POINT: 203 °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

10.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: Not available
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 skin sensitization. ¹⁾ ²⁾
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: Not available
PERSISTENCE AND DEGRADABILITY: Not available
BIOACCUMULATIVE POTENTIAL: Not available
MOBILITY IN SOIL: Not available
OTHER ADVERSE EFFECTS: Not available

13.DISPOSAL CONSIDERATION

Disposing of this material/container should be done under all the regulations or handled by 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)

All the information herein described is either from our own data or technical reference openly available from the publication.

Users of the product herein mentioned are requested to utilize the information at their own responsibility. The information given here is based on the newest ones at the time of the preparation of the data sheets.

However, it may be corrected from time to time due to the alteration of law/regulation and/or newly obtained toxic data.