SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

IDENTIFICATION OF THE SUBSTANCE OR PREPARATION

PRODUCT NAME: DIABOND №1663Gクロ(BLACK)

GENERAL USE: Adhesive.

PRODUCT DESCRIPTION: Chloroprene rubber based adhesive

COMPANY IDENTIFICATION

MANUFACTURER'S NAME: NOGAWA CHEMICAL CO.,LTD.

ADDRESS: 15-15,Nihombashi-kodemma-cho,Chuo-ku,Tokyo 103-0001 Japan

EMERGENCY TELEPHONE NUMBER:

WEEKDAYS : +81-3-3662-8991 (JAPAN)

NIGHT/WEEKENDS : +81-48-265-1967 (JAPAN)

TELEPHONE NUMBER FOR INFORMATION : +81-48-265-1967 (JAPAN)

DATA PREPARED: 2011/11/8

LAST REVISION: 2016/9/20

DATA ISSUED : 2016/9/20

SECTION 2 SUMMARY OF DANGER AND HAZARD

The most important hazards : Highly flammable liquid and vapour

GHS classification :	Flammable liquid	
Physical and chemical hazard;	Category 2	
Human health hazard:		Hazard statement:
Acute toxicity (oral) :	Category 5	May be harmful if swallowed
Acute toxicity (dermal) :	Not classified	—
Acute toxicity (inhalation: gas) :	Not applicable	—
Acute toxicity (inhalation: vapour) :	Category 4	Harmful if inhaled
Acute toxicity (inhalation:dust,mist) :	Classification not possible	—
Skin corrosion/irritation:	Category 2	Causes skin irritation
Serious eye damage / eye irritation :	Category 2A-2B	Causes serious eye irritation
Respiratory sensitizer :	Classification not possible	—
Skin sensitizer :	Not classified	—
Germ cell mutagenicity :	Not classified	—
Carcinogenicity :	Category 2	Suspected of causing cancer
Toxic to reproduction :	Category 1A	May damage fertility or the unborn child
Specific target organs/systemic toxicity following single exposure :	Category 1	Causes damage to organs
Specific target organs/systemic toxicity following repeated exposure :	Category 1	Causes damage to organs through prolonged or repeated exposure
Aspiration hazard :	Not classified	—
Environmental hazard		
Hazardous to the aquatic environment (acute) :	Category 2	Toxic to aquatic life
Hazardous to the aquatic environment (chronic) :	Category 4	May cause long lasting harmful effects to aquatic life

Label elements

Pictogram or Symbol :

Signal word : Danger

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

SINGLE OR MIXTURE: Mixture
PRODUCT NAME: Chloroprene rubber based adhesive

HAZARDOUS COMPONENTS	CAS №.	CONTENTS (Weight %)	EXPOSURE LIMITS OSHA PEL	ACGIH TLV-STEL
Chloroprene rubber etc.	Listed	34±1.5	N/E	N/E
Rosin	8050-09-7	(1>Include)	*	*
2,6-Di-t-butyl-4-cresol	128-37-0	(0.5>Include)	*	*
Zinc oxide	1314-13-2	(0.5>Include)	5 mg/m3	10mg/m3
Anhydrous silica	7631-86-9	(2>Include)	*	*
Carbon black	1333-86-4	(1>Include)	3.5 mg/m3	*
Toluene	108-88-3	35～45	200 ppm	150 ppm
n-Hexane	110-54-3	10～20	500 ppm	1000 ppm
Acetone	67-64-1	5～15	1000 ppm	750 ppm
Saturated hydrocarbon	Listed	1～10	*	*

* N/E means : Not established * means : No data

SECTION 4 FIRST AID MEASURES

INHALATION: Remove to fresh air. Get medical attention immediately.
SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.
EYE CONTACT: Flush eye with water for 15 minutes. Get medical attention .
INGESTION: If swallowed,do not induce vomiting. Get immediate medical attention .
Concise information on the most important signs and symptom: Dizziness, headache, nausea hosted if, immediately stop the work, inhale the fresh air.

Emergency protective measures : Especially nothing.
Note to physicians: Necessary to treat similar to the organic solvent poisoning .

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Dry chemical powder, carbon dioxide, foam and dry sand.
PROHIBITED EXTINGUISHING MEDIA : Water.
SPECIFIC HAZARDS DURING FIRE: Vapors may form explosive mixture with air. The combustion gas contains poisonous gases such as halogen gas.
PARTICULAR FIRE FIGHTING: Do not use water to extinguish fire. Extinguish a fire from upwind and wear protective equipment. Containers can be moved in case of fire nearby, then remove to safe place immediately.
PROTECTION FOR FIREFIGHTERS: Wear protective clothing in addition to heat, wear a gas mask for the halogen gas and impervious gloves.

SECTION 6 ACCIDENTAL RELEASE MEASURES

CAUTIONS FOR PERSONNEL: Wear a gas mask for organic solvent gas and impervious gloves.
CAUTIONS FOR ENVIRONMENT: Is discharged into rivers, careful not to cause damage to the environment. The large amounts of runoff to prevent such spills quotes mound.
REMOVAL METHOD: Spilled material and collected in sealed containers, then remove to safe place. Dry sand, earth, to recover adsorbed to the other non-combustible. Deposits, and the waste is treated on the basis that the relevant legislation.
SECOND ACCIDENT: Ignition source, the high temperature thing, and the combustible are quickly removed. Recovered with the aid of materials that do not cause sparks. The ignition in case, prepare a fire extinguisher.

SECTION 7 CAUTIONS OF HANDLING AND STORAGE

HANDLING: Keep away from sources of ignition.
ENGINEERING MEASURES: Use explosion-proof equipment. Use with adequate ventilation. A tightly closed container.Flames, sparks, to prohibit the use of high temperatures.
CAUTIONS FOR SAFETY HANDLING: In an enclosed area, give sufficient local exhaust ventilation, with appropriate protective equipment.
STORAGE
ADEQUATE STORAGE COUDITION: Avoid direct sunlight, store in a tightly closed container 5～35 ℃. The good ventilation to prevent vapor residence.
ADDITIONALLY: Follows providing in the law.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING MEASURES:
VENTILATION: Local exhaust;Required. Generally required to reduce exposure to blow OSHA allowable levels. Use explosion proof moter only.

CONTROL PARAMETERS :	OSHA PEL	ACGIH(2014) TLV-TWA
Rosin	*	*
2,6-Di-t-butyl-4-cresol	*	2 mg/m3
Zinc oxide	5 mg/m3	2 mg/m3
Anhydrous silica	*	10 mg/m3
Carbon black	3.5 mg/m3	3.5 mg/m3
Toluene	200 ppm	20 ppm
n-Hexane	500 ppm	50 ppm
Acetone	1000 ppm	500 ppm
Saturated hydrocarbon	*	*

PERSONAL PROTECTION EQUIPMENT:
RESPIRATORY PROTECTION; Use either a self-contained air supplied respirator or organic vaper respirator.
PROTECTIVE GLOVES; Rubber gloves, Polyethylene gloves.
EYE PROTECTION; Chemical safety goggles, glasses or fase shield.
SKIN AND BODY PROTECTIVE EQUIPMENT; Work clothing, safety shoes.
ADDITIONALLY: Do not eat, drink and smoke during work .

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Liquid
COLOR: Black
BOILING POINT: 56.3～110.8℃
MELTING POINT: 0℃>
FLASH POINT: -17℃
AUTO-IGNITION TEMPERATURE: 240℃
FLAMMABLE LIMITS: Lower : 1% Upper : 13%
VAPOR PRESSURE: 36.3 kPa (n-Hexane)
SPECIFIC GRAVITY (H_2O=1): 0.92±0.02 g/cm3(20℃)
SOLUBILITY IN WATER: Water ; Insoluble
SOLUBILITY IN ORGANIC SOLVENTS: Toluene; Soluble

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable under normal condition and anticipated storage.
INCOMPATIBLE MATERIALS: Strong oxidizers and acids.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide, Chlorine,Hydrogen chloride when burned.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Extra heat.

SECTION 11 TOXICOLOGICAL INFORMATION

SUBSTANCE	ACUTE TOXICITY RAT ORAL LD50	CARCINOGENIC EFFECTS IARC
Rosin	3 mg/kg	*
2,6-Di-t-butyl-4-cresol	890 mg/kg	3
Zinc oxide	7950 mg/kg	*
Anhydrous silica	>10000 mg/kg	3
Carbon black	15400 mg/kg	2B
Toluene	636 mg/kg	3
n-Hexane	25000 mg/kg	*
Acetone	5800 mg/kg	*
Saturated hydrocarbon	*	*

(Note) "—" mean "not classified", and "＊" indicates "no data".

OTHER: See SECTION 2

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY

FISH TOXICITY	LC50		
Rosin	No data		
2,6-Di-t-butyl-4-cresol	5 ppm	48 hr	Killifish
Zinc oxide	20 mg/L	48 hr	Killifish
Anhydrous silica	No data		
Carbon black	No data		
Toluene	22.7 ppm	72 hr	Goldfish
n-Hexane	No data		
Acetone	580～8120 ppm	96 hr	Freshwater fish
Saturated hydrocarbon	No data		

OTHER: See SECTION 2

SECTION 13 DISPOSAL CONSIDERATIONS

SAFETY HANDLING:

Use with adequate ventilation. Avoid breathing vaper or gas. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use spark-proof tools and explosion-proof equipment. Empty containers retain product residue (liquid and/or vaper) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electrisity or other sources of ignition.

WASTE DISPOSAL METHODS:

Contaminated absorbent material or waste product must be disposed of in accordance with regulations in the Resource Conservation and Recovery Act and/or State, local orEPA regulations.

SECTION 14 TRANSPORT INFORMATION

INTERNATIONAL TRANSPORT INFORMATION:

PROPER SHIPPING NAME:	Adhesive
UN NUMBER:	1133
HAZARDS CLASS:	Flammable Liquid / 3
PACKING GROUP:	2
HAZARD SUBSTANCES NAME:	See section 3.

OTHER: Control temperature: 5～35℃

SECTION 15 REGULATORY INFORMATION

TOXIC SUBSTANCE CONTROL ACT (TSCA) : All ingredients are listed.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE Ⅲ SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the emergency planning and community Right-To-Know Act of 1986 and 40 CFR 372. This information must be included in all SDS's that are copied and distributed for the material.

The toxic chemical(s) contained in this product are :

CHEMICAL NAME	CAS №.	CONTENTS (Weight %)
Rosin	8050-09-7	1>
2,6-Di-t-butyl-4-cresol	128-37-0	0.5>
Zinc oxide	1314-13-2	0.5>
Anhydrous silica	7631-86-9	2>
Carbon black	1333-86-4	1>
Toluene	108-88-3	35～45
n-Hexane	110-54-3	10～20
Acetone	67-64-1	5～15
Saturated hydrocarbon	Listed	1～10

SECTION 16 OTHER INFORMATION

For industrial use only.
This SDS has been revised in accordance with Material Safety Data Sheets Preparation (American National Standard Z 400.1-1993)

Abbreviations

1. The column "OSHA" reveals PEL (Permissible Exposure Limit) under Occupational Safety and Health Administration.
2. The column "ACGIH" reveals TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.
3. The term "IARC" stands for International Agency for Research on Cancer.
4. The term "NTP" stands for National Toxicology Program.

This SDS complies with Hazard Communication Standard under Occupational Safety and Health Act of 1970. This information relates only to specific material designated and may not be valid for such material used in combination with any other material or in any other process. It is based on the level of our knowledge as of the date of preparation.