Created: October 27, 2009 Revised: October 23, 2014

Safety data sheet Safety data sheet

1. Chemicals and company information

Chemical name:

Product name: Cemedine 366E Product number (SDS NO): GJ0077-5 Supplier information details Supplier: Cemedine Co., Ltd.

Address: 1-11-2 Osaki, Shinagawa-ku, Tokyo Gate City Osaki East Tower Department in charge: Quality Control Department Phone number: 03-6421-7413

FAX: 03-6421-7416

Emergency contact phone: 03-6421-7413

2. Hazard Summary Product

GHS Classification, Label Element GHS Classification Physicochemical Hazard

Pyrophoric liquids: Division 2

Harmful to Health Skin

Corrosion and Irritation: Category 2 Serious Damage to the Eye or Eye Irritability: Category 2 Respiratory Sensitivity: Category 1 Skin Sensitivity: Category 1 Reproductive Cell Mutogenicity: Category 1B Reproductive toxicity: Category 1A Reproductive toxicity / effects on or through breastfeeding: Additional category Specific target organ toxicity (single exposure): Category 1 Specific target organ toxicity (single exposure): Category 2 Specific target organ toxicity (single exposure) Single exposure): Category 3 (airway irritation) Specific target organ toxicity (single exposure): Category 3 (anesthetic effect) Specific target organ toxicity (repeated exposure): Category 1 Environmental hazard Aquatic environmental hazard (single exposure) Acute): Category 2 Aquatic environmental toxicity (long-term): Category 3 (Note) GHS classification without description Category: Not applicable / Not applicable / Not classified / Cannot be classified

GHS label element

Warning words: Hazard

Hazard information

Highly flammable liquids and steam Skin irritation Strong eye irritation May cause allergies, asthma or dyspnea when inhaled May cause allergic skin reaction Risk of hereditary disease

Risk of adverse effects on fertility or fetus Risk of harm to lactating offspring Organ damage Risk of respiratory irritation Risk of drowsiness or dizziness Organ damage due to long-term or repeated exposure Toxicity to aquatic organisms Long-term continuation Harmful to aquatic organisms due to physical effects May cause organic solvent poisoning. Physical and chemical hazards Very flammable liquid. There is a risk of explosion if steam stays.

3. Composition and ingredient

information Single product / mixture

distinction: Mixture Chemical

specific name: Chloroprene rubber adhesive

Ingredient	Content (%)	CAS no.	Chemical Substances Control Law Number
name Chloroprene	20-30 Private /	Unregistered 10-20	Private / unregistered
rubber Phenol resin	Private / Unregistered 1-10 Private /		Private / unregistered
Kumaron resin	Unregistered		Private / unregistered
toluene	27	108-88-3	(3) -2 (3) -60
Petroleum	10-20 Private /	Unregistered	Private / Unregistered
naphtha isopropyl alcohol	0.1-1.0	67-63-0	(2) -207 (3)
xylene n-hexane	0.1-1.0	1330-20-7	-3 (3) -60 (2) -6
ethylbenzene	0.1-1.0	110-54-3	(3) -28 (3)
	0.1-1.0	100-41-4	-60 (3) -481 Private /
Phenol-le	0.1-1.0	108-95-2	unregistered
rosin	1-5 Private /	Unregistered	

NOTE: These values are not product standard values. Hazardous

Hazardous Ingredients "Hazardous Substances to Be Labeled"

Applicable Ingredients Xylene Ethylbenzene Toluene Safety Law

Isopropyl alcohol, Xylene, Ethylbenzene, Toluene, Phenol

Chemical Substances Applicable Ingredients

Xylene n-hexane Ethylbenzene

toluene

4. First aid

Description of first aid

When inhaled

Move to a place with fresh air and rest in a comfortable posture. If you have breathing symptoms: Contact your doctor. Contact your doctor if you feel unwell. When it adheres to the skin (or hair)

Immediately remove all contaminated clothing. Rinse the skin with running water / shower. Wash with plenty of water and soap. Contact your doctor immediately. If skin irritation or rash occurs: Seek medical attention / treatment.

If skin irritation occurs: Seek medical attention / treatment. If it gets in your eyes

Carefully wash with water for a few minutes. If you are wearing contact lenses and can easily remove them, remove them. after that Also continue cleaning. If eye irritation persists: Seek medical attention / treatment. If swallowed

Rinse mouth. Contact your doctor immediately. Special notes for doctors

Special treatment is required.

5. Measures in case of fire

Fire extinguishing agent Appropriate fire extinguishing agent

In case of fire, use foam, powder and carbon dioxide. Specific hazards

Heating may cause the container to explode. Fire can generate irritating, toxic and / or corrosive gases. Fire extinguishing water or diluted water may cause pollution. Steam may reach the ignition source and flash back. Recommendations for fire extinguishers

Unique fire extinguishing method

Evacuate to a safe place except for those involved.

Protection of those who extinguish fires

Wear fireproof / flameproof / fireproof clothing.

6. Measures in case of leakage

Precautions for human body, protective equipment and emergency measures

Keep away from anyone other than those involved. In case of contact with leaks, immediately wash skin or eyes with running water for at least 20 minutes. Provide adequate ventilation until collection is complete. Wear self-contained respiratory protection when handling leaks in poorly ventilated areas. Wear appropriate protective equipment. Be careful of spilled areas as they are slippery. Wear protective equipment such as impermeable gloves to prevent contact with the skin and eyes. Containment and purification methods and equipment

Absorb it on an inert substance (dry sand, soil, etc.) and collect it in a container. If a large amount of spillage occurs, surround it with embankment and then dispose of it. Sweep up and collect in a container. All equipment used when handling leaks should be grounded. Measures to prevent secondary disasters

Stop the leak if it is not dangerous. Eliminate all sources of ignition (no smoking, sparks or flames in the vicinity) Prevent inflow into drains, sewers, basements, or closed areas. An effervescence inhibitor may be used to reduce the vapor concentration.

7. Handling and storage precautions

Handling technical measures

(Prevention of exposure by the operator) Do not inhale dust / smoke / gas / mist / vapor / spray.

Avoid inhalation of dust / smoke / gas / mist / vapor / spray.

(Prevention of fire / explosion)

Keep away from ignition sources such as heat / spark / open flame / high temperature. -no smoking. Ground the container and ground it. Use explosion-proof electrical equipment / ventilation equipment / lighting equipment / other equipment. Use tools that do not generate sparks. Take precautionary measures against electrostatic discharge. Precautions for safe handling

Obtain the instruction manual before use. Do not handle until you have read and understood all safety precautions. Use only outdoors or in well-ventilated areas. Wear protective gloves / protective goggles / face protectors. Wear protective gloves. Wear protective gloves and protective surfaces. Wear protective goggles / welding helmet. Use the designated personal protective equipment. After handling, wash your hands and contaminated areas thoroughly. Do not eat, drink or smoke during handling. Safe storage conditions such as contraindications for compounding

Appropriate storage conditions

Keep the container tight. Lock it and keep it safe. Store in a well-ventilated place. Keep the container tight. Store in a well-ventilated place. Place it in a cool place. Keep the container tightly closed and store at 5 to 35 ° C away from direct sunlight.

8. Exposure prevention and protective measures

Management Metrics

Management Concentration

(Ethylbenzene) Working environment evaluation criteria (2012) <= 20 ppm

(Toluene) Working environment evaluation criteria (2009) <= 20 ppm

(n-hexane) Working environment evaluation standard (2004) <= 40ppm

(Xylene) Working environment evaluation criteria (2004) <= 50 ppm

(Isopropyl alcohol) Working environment evaluation criteria (2004) <= 200 ppm

Allowable concentration

(Ethylbenzene) Japan Society for Industrial Health (2001) 50ppm; 217mg / m3 (Toluene) Japan Society for Industrial Health (1994) 50ppm; 188mg / m3 (skin) (Phenol) Japan Society for Industrial Health (1978) 5ppm; 19mg / m3 (Skin) (n-hexane) Japan Society of Industrial Science and Technology (1985) 40ppm; 140mg / m3 (Skin) (Xylene) Japan Society of Health Sciences (2001) 50ppm; 217mg / m3 (Isopropyl alcohol) Japan Society of Industrial Science and Technology (1987)) (Maximum value) 400ppm; 980mg / m3 (Ethylbenzene)

ACGIH (2010) TWA: 20ppm (upper airway irritation; kidney damage; swirl tube injury)
(toluene)
ACGIH (2006) TWA: 20ppm (visual injury; female reproduction; miscarriage)
(phenol)
ACGIH (1992) TWA: 5ppm (upper respiratory tract irritation; lung injury; central nervous system injury) (n-hexane)
ACGIH (1996) TWA: 50ppm (central nervous system injury; peripheral neuropathy; eye irritation)
(xylene)
ACGIH(1992) TWA: 100ppm
STEL: 150ppm (upper respiratory tract and eye irritation; central nervous system injury)
(Isopropyl alcohol)
ACGIH(2001) TWA: 200ppm
STEL: 400ppm (eye and upper respiratory tract irritation; central nervous system injury)
(Rosin)
ACGIH (1992) TWA: As low as possible (L) (skin sensitization; dermatitis; asthma)
(Kumaron resin)
ACGIH (2007) TWA: 5ppm (liver disorder)
Annotation (symptoms, ingestion route, etc.) (n-hexane) Skin absorption

(Phenol) Skin absorption
(ÿÿÿ) Skin irritation; Respiratory irritation

prevention

Equipment measures

Handle in a well-ventilated area. Protective equipment

respiratory protection

Wear respiratory protective equipment if ventilation is inadequate. Hand protectors

Wear protective gloves. Eye protector

Wear protective goggles / face protectors. Skin and body protectors

Wear protective clothing.

Hygiene measures

Avoid contact during pregnancy / lactation.
Thoroughly wash contaminated areas after handling.
Do not eat, drink or smoke when using this product. Keep contaminated work clothes out of the workplace. Take off contaminated clothing and wash when reusing. Wash your hands thoroughly after handling. Wash your hands at breaks and at the end of work. Gargle at breaks and at the end of work.

9. Physical and chemical properties

Information about basic physical and chemical properties

Physical states

Shape: Paste
Color: black
Smell: Solvent odor

Specific temperature / temperature range where physical conditions change

Initial distillate / boiling point: 69 (Petroleum naphtha) ÿ

Flash point: -22 (Petroleum naphtha) ÿ

Explosion characteristics: Ignition or explosion range

Lower limit: 1.1 (petroleum naphtha, toluene) vol%

Upper limit: 7.5 (Petroleum naphtha) vol%

Specific gravity/density: 1.0g/

cm3 solubility

Solubility in water: insoluble

10. Stability and reactivity

Chemical stability Stable

under normal storage / handling conditions. Stable at normal temperature

and pressure

11. Harmful information

Information on toxicological effects

Acute toxicity Acute toxicity (oral) [Data

published in Japan]

(Ethylbenzene) rat LD50

= 3500 mg / kg (EHC 186, 1996) (Phenole) rat LD50 =

375 mg / kg (calculated value) (Xylene) rat LD50 = 3500

mg / kg (Ministry of the Environment Risk Assessment

Volume 1) , 2002) (Isopropyl alcohol) rat LD50 = 3437

mg / kg (calculated value) Acute toxicity (percutaneous) [Japanese

publication basis data]

(Phenole) rat

LD50 = 670 mg / kg (EHC 161 1994) (Isopropyl alcohol)

rabbit LD50 = 4059 mg / kg (CERI hazard data

collection, 1999) (Rodin) rat LD50 = 2500 mg / kg (IUCLID) , 2000) Acute toxicity

(inhalation) [Japanese publication basis data]

(Ethylbenzene) vapor:

rat LC50 = 4000 ppm (ATSDR, 1999) (Toluene) vapor: rat

LC50 = 3319-8800 ppm / 4hr (EU-RAR, 2003) et al

(ÿ ÿ ÿ)

mist: rat LC50 = ca. 2.3 mg / L / 4hr (IUCLID, 2000)

Labor Standards Law: Disease chemicals

Toluene; Phenol; n-Hexane; Xylene Local Effect

Skin corrosive / irritant Skin

corrosive / irritant component data [Data

published in Japan]

(Ethylbenzene) Rabbit

15 mg / 24H open; MILD (Toluene)

Rabbit 435 mg; MILD 500 mg; MODERATE (Phenole) Rabbit / Human Corrosive (EHC 161, 1994) (Zinc Oxide) Rabbit no dermal reactions (EU-RAR, 2004) (Xylene) Rabbit 500 mg / 24H; MODERATE Serious damage / irritation to the eye Eye damage / irritant component data [Japanese publication basis data]

(Toluene)
Rabbit 0.87 mg; MILD 2 mg / 24H; SEVERE 100 mg / 30S rinse; MILD (Phenole) Rabbit irreversible action (EHC 161, 1994) (n-hexane) Rabbit 10 mg; MILD (Xylene) Rabbit 87 mg; MILD Rabbit 5 mg / 24H; SEVERE (Isopropyl Aluminum) Rabbit (CERI Hazard Data Collection, 1999 et al) Sensitivity Respiratory Sensitivity [Japanese publication basis data]

(Rosin) cat.1; human: ACGIH 7th, 2001 Skin sensitization [Japanese publication basis data]

(Rosin) cat.1; human: ACGIH 7th, 2001

Germ cell mutagenicity

[data published in Japan]

(Phenol) cat.1B; CERI / NITE Hazardous Assessment Report No.32, 2005

No teratogenic data

Carcinogenic

(ethylbenzene)

IARC-Gr.2B: May be carcinogenic to humans (toluene)

IARC-Gr.3: Cannot be classified as carcinogenic to humans (phenol)

IARC-Gr.3: Cannot be classified as carcinogenic to humans (xylene)

IARC-Gr.3: Cannot be classified as carcinogenic to humans (isopropyl alcohol)
IARC-Gr.3: Cannot be classified as carcinogenic to humans (chloroprene rubber)
IARC-Gr.3: Cannot be classified as carcinogenic to humans (toluene)

ACGIH-A4 (2006): Cannot be classified as a human carcinogen (xylene)
ACGIH-A4 (1992): Cannot be classified as a human carcinogen (ethylbenzene)
ACGIH-A3 (2010): A confirmed animal carcinogen, but its association with humans is unknown. (Isopropyl alcohol)
ACGIH-A4 (2001): Cannot be classified as a human carcinogen (phenol)
ACGIH-A4 (1992): Cannot be classified as a human carcinogen

(Ethylbenzene) Japan

Society of Industrial Science and Technology-2B: Substances with relatively insufficient evidence that humans are probably carcinogenic Reproductive toxicity [Data published in Japan]

(Toluene) cat.1A; NITE Initial Risk Assessment Report 87, 2006

(Toluene) cat.add; SIDS (J), Access on Apr. 2012 (Isopropyl alcohol)

cat.2; ACGIH, 2003 (Xylene) cat. 1B; IRIS, 2003 (n-hexane) cat.2; rat:

ATSDR, 1999 (ethylbenzene) cat.1B; SIDS, 2005 (phenol) cat.1B;

CERI / NITE Harmfulness Assessment Report No.32, 2005

Immediate effects of short-term exposure, delayed / chronic effects of long-term exposure Specific target organ toxicity Specific target organ toxicity (single exposure) [Category 1]

[Data published in Japan]

(Kumaron resin) Liver, kidney

(toluene) Central nervous system (IARC 47, 1989; IRIS tox. Review, 2005) [Category 3 (airway irritation)]

[Data published in Japan]

(Kumaron resin) Airway irritation

(toluene) Airway irritation (PATTY 5th, 2001) [Category 3 (anesthetic action)]

[Data published in Japan]

(Toluene) Anesthesia (EHC 52, 1985; IARC 47, 1989) Specific target organ toxicity (repeated exposure) [Category 1]

[Data published in Japan]

(Toluene) Central Nervous System, Kidney (Occupational Medicine Vol. 36, 1994) Inhalation Respiratory Harm [Category 1]

[Data published in Japan]

(Toluene) cat.1; hydrocarbon, kinematic viscosity = 0.86 mm2 / s (40 ÿ)

---

12. Ecotoxicity Ecotoxicity

Aquatic toxicity

Toxicity to aquatic

organisms Harmful to

aquatic organisms due to long-term continuous effects

Aquatic toxicity (acute) Ingredient data [Data published in

Japan]

(Ethylbenzene)

Crustacean (Brown Shrimp) LC50 = 0.4mg / L / 96hr (CERI ÿ NITE, 2006) (Toluene) Crustacean (Ceriodaphnia dubia) EC50 = 3.78 mg / L / 48hr (NITE Initial Risk Assessment Report, 2006)

(Phenole) Crustaceans (Daphnia magna) LC50 = 3.1 mg / L / 48hr (EU-RAR, 2002) (n-hexane) Crustaceans (Daphnia magna) LC50 = 3.88 mg / L / 48hr (EHC122, 1991) (Xylene) Fish (Daphnia) LC50 = 3.3mg / L / 96hr (CERI_NITE, 2005)

(Isopropyl alcohol) Fish (Himedaka) LC50> 100 mg / L / 96hr (Ministry of the Environment, 1997)

(Rosin)

Crustacean (Daphnia magna) EC50 = 4.5mg / L / 48hr (IUCLID, 2000)

Aquatic toxicity (long-term) component

data [data published in Japan]

(Toluene)

Ceriodaphnia dubia NOEC = 0.74 mg / L / 7days (NITE Initial Risk Assessment Report, 2006) Water solubility

(Ethylbenzene) 0.015

g / 100 ml (20 C) (ICSC, 2007) (Toluene)

Insoluble (ICSC, 2002) (Phenol) Insoluble

(ICSC, 2001) (n-hexane) 0.0013 g / 100 ml (20)

C) (ICSC, 2000) (Isopropyl alcohol) 100 g / 100

ml (PHYSPROP Database, 2005) (Rosin)

Insoluble (ICSC, 2004) Persistent / Degradable

(Ethylbenzene) Intrinsically easy to decompose ,

Rapidly volatilizes from water (SIDS, 2005)

(toluene)

Decomposition by BOD: 123% (existing chemical substance safety inspection

data) (Phenol)

Decomposition by BOD: 85% (existing chemical safety check data) (n-hexane)

Decomposition by BOD: 100% (existing chemical substance safety inspection

data) (xylene)

Decomposition by BOD: 39% (CERI Hazard Data Collection, 2005) (Rosin)

Degradation by BOD: 36-48% (IUCLID, 2000)

Bioaccumulation

(Isopropyl alcohol) log Pow =

0.05 (ICSC, 1999) (Ethylbenzene)

log Kow = 3.15 (PHYSPROP

Database, 2005) (Toluene) log Kow = 2.73 (PHYSPROP

Database, 2008) (Phenol) log Pow = 1.46 (ICSC, 2001) (n-

hexane) log Pow = 3.9 (ICSC, 2000) (xylene) log Pow = 3.16

(PHYSPROP Database, 2005)

13. Disposal precautions

Waste disposal method

Avoid release to the environment.

Dispose of contents / containers in accordance with local / national

rules. According to the classification of the Waste Disposal and Public Cleansing Law, waste oil and waste plastics of specially controlled industrial waste a

It is a product, and its processing is outsourced to a licensed specialized processing company. After the container is used up, if the

adhesive is dried and solidified, it becomes a mixture of industrial waste metal waste and waste plastics.

14. Transport Precautions

UN Number, UN Classification

Number: 1133 Product Name

(UN Transport Name): Adhesive,

Flammable Liquid Containing UN

Classification (Dangerous Class in Transport): 3 Container Grade: II

Guideline number: 128

Special safety measures

Make sure that there are no leaks in the container, handle it so that it does not fall, drop, or break, and ensure that the load does not collapse. Follow the provisions of laws and regulations such as the Fire Service Act and the Ship Safety Act

15. Applicable Acts

Safety, health and environmental rules / regulations specific to the product

Industrial Safety and Health Act

Specified Chemical Substance

Class 2 Ethylbenzene

When the total content of ethylbenzene and organic solvent exceeds 5% and painting work is performed in an indoor workplace, etc.

Specified Chemical Substance

Class 3 Phenol Specified

Chemical Substance Special Control Substance

Ethylbenzene Class 2 Organic Solvent,

etc.

Name display Hazard / Hazard (Article 18 of the Ordinance)

Isopropyl alcohol; n-hexane; phenol; ethylbenzene; xylene; toluene Appendix 1 Dangerous Goods (Article 1, Article 6, Article 15)

Dangerous Goods / Flammable Goods (-30 ÿ <= Flash Point <0 ÿ) Name

Notification Dangerous Goods / Hazardous Goods (Article 57-2, Article 18-2 Appendix 9)

Zinc Oxide; Xylene; Isopropyl alcohol Ethylbenzene; Phenol; Rosin; Toluene; Bear

Ron resin; n-hexane corrosive

liquid (Rule 326) Phenol Chemical

Substance Control Promotion

(PRTR) Law

Class 1 Designated Chemical

Substance Toluene Fire

Service Act

Class 2 Flammable Solid Danger Grade ÿ / ÿ

Chemical trial law

Priority assessment chemicals

n-hexane; toluene; ethylbenzene; phenol; isopropyl alcohol; xylene

Offensive odor prevention method

Toluene; Xylene Air Pollution

Control Act

Hazardous air pollutants (9th report of Chukan Judgment)

Zinc oxide; Ethylbenzene; Xylene; Phenol; n-hexane Hazardous air pollutants / priority efforts

(9th report of Chukan Judgment) Toluene specific substances (Article 10 of the Government Ordinance)

Phenol Ship Safety Law

Pyrophoric liquid classification 3

Aviation law

Pyrophoric liquid classification 3

16. Other Information

References

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 18th edit., 2013 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)

2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)

2014 TLVs and BEIs. (ACGIH)

http://monographs.iarc.fr/ENG/Classification/index.php

JIS Z 7253 (2012)

Supplier's data/information

Limitation of liability

The data presented here is based on the latest knowledge and experience. The purpose of the Material Safety Data Sheet is to provide information for the safe handling of the product. The data provided here does not guarantee the performance of the product.

[About us]

Seller: Suzuki Motor Sales Shizuoka
Co., Ltd. Location: 2-20-35 Furusho, Aoi-ku, Shizuoka-shi
TEL:054-261-6101