

MATERIAL SAFETY DATA SHEETS

For

THE REPAIR GLUE

1 Identification of the substance/preparation and of the company/undertaking

Product details

Chemical Name: The repair glue

Alternative names: Rubber solution

Export to: The European

Application of the substance: Bicycle tire repair

Uses advised against: Do not use near heat or ignition sources. Use in a well-ventilated area.

Manufacturer/Supplier: Shanghai Shuanghuan Metal Rubber Factory

Address: No.122 Xinyi Wanxiang Pudong New Area Shanghai

2 Composition/information on ingredients

Chemical characterization

Description: Mixture of substances listed below with additions.

<i>.Components Number</i>	<i>CAS Number</i>	<i>EC Number</i>	<i>Percent (%)</i>	<i>Classification</i>
<i>Cyclohexane</i>	<i>110-82-7</i>	<i>203-806-2</i>	<i>23</i>	<i>Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3 Aquatic Acute 1 Aquatic Chronic 1</i>
<i>Heptane</i>	<i>1 42-82-5</i>	<i>205-563-8</i>	<i>55</i>	<i>Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3 Aquatic Acute 1 Aquatic Chronic 1</i>

Methylcyclohexane	108-87-2	203-624-3	12	Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3 Aquatic Chronic 2
Rubber	9006-04-6	232-689-0	10	N/A

Note: CAS Number is Chemical Abstract Service Registry Number. EINECS Number is EUROPEAN Inventory of Existing Commercial Chemical Substance. N/A denote no applicable.

3 Hazards identification

Hazards Classification

In accordance with Regulation (EC) No. 1272/2008(CLP), the sample is divided into the following hazard category.

Physical hazard : Flammable liquids (Category 2)

Health hazard : Aspiration hazard (Category 1)

Skin irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

Environment hazard : Chronic aquatic toxicity (Category 1)

Label elements



Hazard Pictograms:

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H410: Very toxic to aquatic life with long lasting effects

Precautionary statements:

P210: Keep away from heat/sparks/open flames/hot surfaces.-No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hand thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face

protection.

P301 + P310:IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P303 + P361 + P353:IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340:IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P331: Do NOT induce vomiting.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P362: Take off contaminated clothing and wash before reuse.

P370 + P378:In case of fire: Use Water fog, foam, dry chemical or carbon dioxide for extinction.

P391: Collect spillage.

P403 + P233:Store in a well-ventilated place. Keep container tightly closed.

P403 + P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up

P501: Dispose of contents/container in according with local regulation.

Supplemental hazard : Not available data

Other hazards:This substance/mixture contains no ingredients considered to be Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) at levels of 0.1% or higher.

4 First aid measures

Persons using these products should consult a physician or other medical professional in an accident involving these products in injury. Specific first-aid measures are as follows:

Eye Contact: Wash with plenty of water. If irritation persists, seek medical assistance.

Skin Contact: Wash with plenty of water. In case of contact with melted material, cool down with cold water and seek medical assistance. Do not remove the product that solidified on skin. Treat as a burn. Prevent from frequently or long-time skin contact – protective clothing and gloves. After work wash hands with water and soap

Inhalation: Ensure a sufficient air exchange. Move the affected person away from the contaminated area into fresh air, seek medical assistance.

Ingestion:Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms and effects, both acute and delayed:

May cause eye and skin irritation. Excessive exposure may cause irritation to upper respiratory tract (nose and throat), drowsiness and dizziness. Prolonged or repeated exposure can cause narcosis

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically

5 Fire-fighting measures

Extinguishing media:

Suitable extinguishing media: *Water fog, foam, dry chemical or carbon dioxide.*

Unsuitable extinguishing media: *Do not use solid water stream and water spray jet.*

Special hazards arising from the substance or mixture:

Flammable liquid, Can release vapors that form explosive mixtures at temperatures above the flashpoint. Open fire should be easy to burn and explosion. Contacting with oxidant may cause chemical reaction or combustion. Containers may explode in the heat of a fire. The vapor is heavier than air, easy accumulate in the low-lying place and spread along the ground, in case of a source of ignition and flash back

.Special fire fighting methods and special protective actions for fire-fighters:

Wear self contained breathing apparatus for fire fighting if necessary.

6 Accidental release measures

Person precautions protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Measures for environmental protection: *Do not let product enter drains. It floats.*

Methods for Cleaning Up: *Small amount of divulgence: absorb with sandy clay, vermiculite or other inert material. Massive divulgence: Build diking or dig pit to accept. Shift with the pump into the tanker or the special collector, recycle or transport to waste treatment place for handling.*

Remove contaminated soil and dispose of safely

7 Handling and storage

Advices on Safe Handling: *Keep away from sources of ignition. With closed operation. Supply with sufficient partial air exhaust. To prevent the vapor flows into the workplace. The operating staff must have received special training and abide by the operating regulations. It is advised that the staff wear self-contained breathing filter mask, wear work clothes, and wear gloves. Keep away from fire and heating sources. No smoking in the workplace. Equip with relevant types and quantities of the extinguishment instruments and devices for divulgence handling. The emptying container may include harmful residue.*

Precautions Against Fire and Explosion: *Static charge buildup can be a potential fire hazard when used in the presence of volatile or flammable vapors or in high airborne dust concentration.*

Storage

Requirements for Storage Rooms and Vessels: Keep container dry. Keep in a cool, well-ventilated place. Keep away from direct sunlight and other sources of heat or ignition. Avoid storage of bulk product at temperatures above ambient to minimize risk of exothermic degradation, self-heating and possible self-ignition (Refer to Section 10). Avoid storage under pressure or at elevated temperatures to minimize particulate clustering. Do not stack intermediate bulk containers.

Advice on Storage Compatibility: Store in carbon steel, stainless steel, phenolic lined steel drums. Do not store in aluminum, copper, galvanized iron, galvanized steel. Keep separate with the oxidizing agent. Avoid contacting with oxidizer and strong acid. Keep the sample easy to be identified. Storage areas should be equipped with spill response equipment. Storage class (TRGS 510): Flammable liquids

Further Information on Storage Conditions: Product has a tendency to accumulate static charge during transport, handling and processing. Reducing the velocity of transport will reduce charging. Static charge buildup can be a potential fire hazard when used in presence of volatile or flammable mixtures. Take precautionary measures against static discharge. Earth/Ground all equipment

8 Exposure controls/personal protection

Control parameters

Occupational exposure limits : Cyclohexane: WEL-TWA 200 ppm 700 mg/m³

Heptanes: WEL-TEA 500 ppm 2,085 mg/m³

Methylcyclohexane: 500 ppm OSHA; 400 ppm, 1610 mg/m³ ACGIH

Biological limit values : No available data.

Exposure controls

Monitoring Method : No available data.


Appropriate engineering controls : Equipped with an eyewash facility and a safety shower.


Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits


Personal protective equipment:

Respiratory Protection : Wear filter type respirators, a full-face particle respirator type P3

(EN143) respirator. 

Eye Protection : Use face shield and safety glasses for eye protection. 

Body Protection : Wear suitable safety goggles. 

Hands Protection: Wear suitable protective gloves, such as 0.4 mm nitrile rubber gloves 

Other Protection : No smoking, dining and drinking water in the workplace. Keep good habit of hygiene. Shower and change clothes after work.

Environmental exposure controls:

Prevent to enter sewage, soil, river and sea.

9 Physical and chemical properties

· Physical state and appearance:	<i>Milky white rubber matrix</i>
· Odor:	<i>Aromatic</i>
· PH (1% soln/water):	<i>No available data.</i>
· Boiling Point:	<i>90 °C</i>
· Melting Point:	<i>No available data.</i>
· Flashpoint:	<i>No available data.</i>
· Density:	<i>No available data.</i>
Partition coefficient)(n-octanol/water)	<i>No available data.</i>
Critical Temperature:	<i>No available data.</i>
· Solubility:	<i>Slightly soluble in water.</i>
· Vapor Pressure:	<i>No available data. .</i>
· Vapour density:	<i>No available data.</i>
· Volatility:	<i>No available data.</i>
· Ignition temperature	<i>No available data.</i>
Ionicity (in Water):	<i>No available data.</i>
Melt index:	<i>No available data.</i>
Viscosity	<i>No available data.</i>

10 Stability and reactivity

Reactivity: *The substance is stable under normal storage and handling conditions.*

Stability: *Stable under normal temperature.*

Conditions to Avoid: *Accumulation of product in areas exposed to elevated temperatures for extended periods in air may result in self-heating and auto ignition. Avoid elevated temperatures in storage for prolonged periods of time.*

Incompatibility with Various Substances: *Avoid to mix polymer of acetic acid and Strong oxidizing acids mixture when process.*

Hazardous Decomposition Products : *Carbon monoxide, carbon dioxide and other unidentified*

product.Hazardous Reactions: *Does not react with air, water or other common materials.*

Corrosivity: *not available.*

Special remarks on reactivity: *not available.*

Special remarks on corrosivity: *not available.*

11 Toxicological information

Acute Toxicity: *Cyclohexane: LD50 Oral - Rat - 12,705 mg/kg*

LC50 Inhalation - Rat - 4 h - 34,000 mg/l

Heptanes: LC50 Inhalation-mouse: 75000 mg/m³ / 2 hours

LD50 Intravenous-Mouse: 222 mg / kg

Methylcyclohexane: LD50 Oral - rat: > 3200 mg/kg

LD50 Oral - Mouse: 2250 mg / m / 24 hours

Skin corrosion/irritation: No available data.

Serious eye damage/eye irritation: No available data.

Respiratory or skin sensitisation: No available data.

Germ cell mutagenicity: No available data.

Carcinogenicity : IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No available data.

Specific target organ toxicity-single exposure: May cause drowsiness or dizziness.

Specific target organ toxicity-repeated exposure: No available data.

Aspiration hazard: No available data.

Potential health effects : Inhalation: May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin contact: May cause skin irritation.

Eye contact: May cause eye irritation.

Additional information: Cyclohexane: RTECS: GU6300000

Heptanes: RTECS: MI7700000

Methylcyclohexane: RTECS: GV6125000

12 Ecological information

Toxicity: Toxicity to fish : Cyclohexane: LC50-Pimephales promelas (fathead minnow) - 4.53 mg/l -96 h

Heptanes: LC50 - Carassius auratus (goldfish) - 4 mg/l - 24.0 h
 LC50 - other fish - 5.8 mg/l - 96.0 h

Toxicity to daphnia and other aquatic

invertebrates: Cyclohexane: EC50-Daphnia magna (Water flea)-0.9 mg/l-48 h

Heptanes: EC50-Daphnia magna (Water flea)-1.50 mg/l-48 h

Methylcyclohexane: EC50-Daphnia magna (Water flea)-1.47mg/l - 48 h

Persistence and degradability: Heptanes: Bioaccumulation in fish.

Bioaccumulative potential: No available data.

Mobility in soil : No available data.

Results of PBT and vPvB assessment: This substance/mixture contains no ingredients considered to be Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) at levels of 0.1% or higher

Other adverse effects: Toxic to aquatic life


13 Disposal considerations


Recycle if possible. Dispose product according tonational/regional regulations in force. Send to authorized disposal plants or to authorize controlled condition incinerators. Contaminated


packaging may be recycled or disposed; in this case the receiver must be informed of potential hazards.

Waste Disposal methods: Do not Dump into any sewers, on the ground, or into any body of water. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with appliance laws are the responsibility solely of the waste generator. For unused & uncontaminated product, the preferred options include sending to a licensed, permitted recycler, reclaim, incinerator or other thermal destruction device.

14 T ransport information

.DOT regulations:
.Hazard class: Class 3 flammable liquid
.Identification number: 1133
.Packing group: II
.Proper shipping name: ADHESIVES, CONTAINING A FLAMMABLE LIQUID (FLASHPOINT -26DEG C TO 22 DEG C)
.Label: 

.Land transport ADR/RID (cross-border):
Hazard class: Class 3 flammable liquid
.UN-Number: 1133
Packing group: II
Proper shipping name: ADHESIVES, CONTAINING A FLAMMABLE LIQUID (FLASHPOINT -26 DEG C TO 22 DEG C)
.Label: 

Maritime transport IMDG:
.IMDG Class: Class 3 flammable liquid
.UN Number: 1133
.Label 
.Packaging group: II
.Proper shipping name: ADHESIVES, CONTAINING A FLAMMABLE LIQUID (FLASHPOINT -26 DEG C TO 22 DEG C)

.Air transport ICAO-TI and IATA-DGR:
.ICAO/IATA Class: Class 9, Non Hazardous Goods.
.UN/ID Number: 1133

·Label:



·Packaging group:

II

·Proper shipping name: ADHESIVES, CONTAINING A FLAMMABLE LIQUID
 (FLASHPOINT -26 DEGC TO 22 DEG C)

15.Regulatory information

Sara

.Section 355 (extremely hazardous substances):

None of the ingredient is listed.

.Section 313 (specific toxic chemical listing):

None of the ingredient is listed.

.TSCA (toxic substance control act)

None of the ingredient is listed.

.Proposition 65

.Chemical known to cause cancer:

None of the ingredient is listed.

.Chemical known to cause reproductive toxicity for females:

None of the ingredient is listed.

.Chemical known to cause reproductive toxicity for males:

None of the ingredient is listed

.Chemical known to cause developmental toxicity:

None of the ingredient is listed.

.Carcinogenicity categories:

.EPA (Environmental Protection Agency)

None of the ingredient is listed.

.IARC (International Agency for Research on Cancer)

None of the ingredient is listed.

.NTP (National Toxicology Program):

None of the ingredient is listed

.TLV (Threshold Limit Value established by ACGIH):

None of the ingredient is listed.

.NIOSH-Ca(National Institute for Occupational Safety and Health):

None of the ingredient is listed

.OSHA-Ca(Occupational Safety & Health Administration):

None of the ingredient is listed.

16 Other information

ACGIH: American Conference of Governmental Industrial

ADR :European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS : Chemical Abstracts Service

CLP : Classification Packaging and Labelling

EC : European Commission

ECHA : European Chemicals Agency

EINECS : The European Inventory of Existing Commercial Chemical Substances

GHS : Globally Harmonised System of Classification and Labelling of Chemicals

IARC : International Agency for Research on Cancer

IATA : International Air Transport Association

IBC Code :International code for the construction and equipment of ships carrying dangerous chemical in bulk

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

IC50 : Inhibitory Concentration fifty

LC50 : Lethal Concentration fifty

LD50 : Lethal Dose fifty per cent.

MARPOL:International Convention for the Prevention of Pollution From Ships

REACH:Registration Evaluation And Authorisation Of Chemicals

RID : Regulations Relating to International Carriage of Dangerous Goods by Rail

RTECS : Registry of Toxic Effects of Chemical Substances

STEL : Short term exposure limit

TWA : Time-Weighted Average

OSHA : Occupational Safety and Health Administration

NIOSH : National Institute for Occupational Safety and Health

TLV-TWA: Threshold Limit Value-Time Weighted Average

TLV-STEL: Threshold Limit Value-Short Term Exposure Limit

PEL: Permissible Exposure Limit

MAK:Maximale Arbeitsplatz-Konzentration...

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