Version 1.0, 21th February 2013

Page 1 of 11

490012 WINDSHIELD REPAIR KIT(1)

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

490012- Windshield Repair kit

shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Isobornyl acrylate)

Other means of identification: No data available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: No data available
Uses advised against: No data available

1.3. Details of the supplier of the safety data sheet

Registered company name: KAO CHIANG CHEMICAL CO., LTD

Address: 3F, NO. 82-3 Sec.1, Kuang Fu Rd, San Chung City, Taipei Shien, Taiwan R.O.C.241

Telephone: +886-2-85121361 Fax: +886-2-85121404

1.4. Emergency telephone number

Spill information: +886-2-85121361(24hrs)
Health information: +886-2-85121507(24hrs)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP Classification

Classification	Category	Exposure Route	
Eye irritation	2	-	
STOT SE	3	-	
Skin irritation	2	-	
Skin sensitization	1	-	
Chronic aquatic	2	-	

Risk codes Risk phrases

R36/37/38 Irritating to eyes, respiratory system and skin

R43 May cause sensitization by skin contact

Version 1.0, 21th February 2013

Page 2 of 11

R51/53

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

2.2. Label elements

CLP label

Hazard pictogram:





Signal word: Warning

Hazard Statements:

H315: Causes skin irritation

H317: May cause allergic skin reaction

H319: Causes serious eye irritation

H335: May cause respiratory irritation

H411: Toxic to aquatic life with long lasting effects

Precautionary Statements:

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

P273: Avoid release to the environment.

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

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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

P363: Wash contaminated clothing before reuse.

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

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.1. Mixtures

Hazardous ingredients	CAS No.	EC No.	Index No.	REACH No.	% wt/wt
Hazardous iligiedienis	CAS NO.	LC NO.	IIIUEX NO.	NEACH NO.	/0 WVL/WVL

Benzyl methacrylate	2495-37-6	219-674-4	-	-	15-25
2-hydroxyethyl	868-77-9	212-782-2	607-124-00-X	-	15-25
methacrylate					
Isobornyl acrylate	5888-33-5	227-561-6	-	-	15-25

Version 1.0, 21th February 2013

Page 2 of 11

Urethane (Meth)	-	-	-	-	10-15
acrylate oligomer					
Decyl acrylate	2156-96-9	218-462-9	-	-	5-10
Maleic acid	110-16-7	203-742-5	607-095-00-3	-	1-5
Organic acid	-	-	-		1-5

Hazardous ingredients	Classification according to DSD	Classification according to CLP
		Eye irritation 2; H319
Benzyl methacrylate	Xi; R36/37/38	STOT SE 3; H335
		Skin irritation 2; H315
2-hydroxyethyl	Xi; R36/38	Eye irritation 2; H319
methacrylate	R43	Skin irritation 2; H315
		Skin sensitization 1; H317
		Eye irritation 2; H319
Isobornyl acrylate	Xi; R <mark>36</mark> /37/38	STOT SE 3; H335
	N; R51/53	Skin irritation 2; H315
		Chronic aquatic 2; H411
Urethane (Meth)	Xi; 36/38	Eye irritation 2; H319
acrylate oligomer		Skin irritation 2; H315
		Eye irritation 2; H319
Decyl acrylate	Xi; R36/37/38	STOT SE 3; H335
		Skin irritation 2; H315
	·	Acute toxicity (oral) 4; H302
Maleic acid	Xn; R22	Eye irritation 2; H319
	Xi; R36/37/38	STOT SE 3; H335
	Xi; R43	Skin irritation 2; H315
		Skin sensitization 1; H317
Organic acid	Xi; 36/38	Eye irritation 2; H319
		Skin irritation 2; H315

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Move victim to fresh air. If not breathing, give artificial respiration. Get medical attention.

Skin contact: Immediately wash with plenty of soap and water. Get medical attention if irritation occurs.

Eye contact: Immediately flush eyes with running water for at least 20 minutes holding eyelids open. Get medical attention.

Ingestion: Do not induce vomiting. Give 1-2 glasses of water to a conscious victim. Never give anything by mouth to an unconscious victim. Get medical attention.

Advice for the doctor: Symptomatic treatment

Version 1.0, 21th February 2013

Page 2 of 11

4.2. Most important symptoms and effects, both acute and delayed.

Irritating to eyes, respiratory system and skin; May cause sensitization by skin contact.

4.3. Indication of any immediate medical attention and special treatment need

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use fire extinguishing media suitable to surrounding conditions.

5.2. Special hazards arising from the substance or mixture

Fire/explosion hazard: no data available

Main combustion gas: no data available

5.3. Advice for firefighters

Alert Fire Brigade and tell them location and nature of hazard.

Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water courses.

Use water delivered as a fine spray to control fire and cool adjacent area.

DO NOT approach containers suspected to be hot.

Cool fire exposed containers with water spray from a protected location.

If safe to do so, remove containers from path of fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wearing of suitable protective equipment, such as protective clothing, gloves and eye/face protection, removal of ignition sources and provision of sufficient ventilation, evacuate the danger area and consult experts.

6.2. Environmental precautions

Take precautions to prevent entry into waterways, sewers, or surface drainage systems. Inform respective authorities in case of seepage into water course or sewage system. Disposal according to local or international regulations.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Version 1.0, 21th February 2013

Page 2 of 11

Keep away from heat and direct sunlight. Avoid ingestion, inhalation, skin and eye contact. Prevent formation of aerosols. Ensure good ventilation/exhaustion at the workplace. Handle in accordance with good industrial hygiene practice and any legal requirements.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store only in unopened original receptacles. Keep container tightly sealed. Protect from exposure to the light.

Avoid loss of dissolved air, loss of inhibitor, and contamination with incompatible materials.

Storage incompatibility: Avoid storage above 100°F, exposure to light, loss of dissolved air, loss of inhibitor, and contamination with incompatible materials.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredients with limit values that require monitoring at the workplace:

2-Hydroxyethyl methac	rylate CAS	868-77	'- <mark>9</mark>	
MAK(Germany)			V	vgl.Abschn.IIb

DNELs: not available

PNECs: not available

Additional information: the lists valid during the making were used as basis.

8.2. Exposure controls

Appropriate engineering controls Use: process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protective equipment: General protective and hygienic measures: Keep away from food stuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device

Protection of hands: Protective glove The glove material has to be impermeable and resistant to the product/ the substance/the preparation. Selection of the glove material on consideration of the penetration times, rates penetration times, rates of diffusion and the degradation Material of gloves: Nitrile rubber, NBR

Penetration time of glove material: The exact break trough time has to be found out by the Manufacturer of the protective gloves and has to be observed.

Version 1.0, 21th February 2013

Page 2 of 11

Eye protection: Eye protection with side shields. When there is a potential for a splash hazard, chemical goggles should be used.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Fluid

Odour Characteristic

Odour threshold No data available

pH No data available

Melting point / freezing point No data available

Initial boiling point and boiling range >100° C

Flash point 101 °C

Evaporation rate No data available

Flammability (solid, gas) No data available

Upper / lower flammability or exposure limits No data available

Vapour pressure No data available

Vapour density No data available

Relative density No data available

Solubility(ies) Not miscible or difficult to mix.

Partition coefficient: n-octanol / water No data available

Auto-ignition temperature Product is not self-igniting

Decomposition temperature No data available

Viscosity No data available

Explosive properties Product dose not present an explosion hazard

Oxidising properties No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

No data available

Version 1.0, 21th February 2013

Page 2 of 11

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Oxidizers, amins, strong Lewis acids, mineral acids, and thiosulfates

10.5. Incompatible materials

See section 7.2

10.6. Hazardous decomposition products

Irritant gases/vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity:

Benzyl methacrylate:

No data available

2-hydroxyethyl methacrylate:

LD50 (rat, oral): 5050 mg/kg

LD50 (rabbit, dermal) : > 3000 mg/kg

Isobornyl acrylate:

No data available

Urethane (Meth) acrylate oligomer:

No data available

Decyl acrylate:

No data available

Maleic acid:

LD50 (rat, oral): 708 mg/kg

LD50 (rabbit, dermal): 1560 mg/kg LC50 (rat, inhalation): >0.72 mg/l

Organic acid: No data available

No data available

Corrosive/ irritation: Benzyl methacrylate:

Skin: this material can cause inflammation of the skin concontact in

some persons.

Eye: this material can cause eye irritation and damage in some persons.

2-hydroxyethyl methacrylate:

Skin (rabbit): slight irritating

Version 1.0, 21th February 2013

Page 2 of 11

Eye (rat): moderately irritating

Isobornyl acrylate:

Skin: this material can cause inflammation of the skin concontact in some persons.

Eye: this material can cause eye irritation and damage in some persons.

Respiratory system: this material can cause respiratory irritation in some persons.

Urethane (Meth) acrylate oligomer:

No data available

Decyl acrylate:

Skin: this material can cause inflammation of the skin concontact in some persons.

Eye: this material can cause eye irritation and damage in some persons.

Respiratory system: this material can cause respiratory irritation in some persons.

Maleic acid:

Skin (rabbit): irritating Eye (rabbit): irritating Respiratory: irritating

Organic acid:

No data available

Respiratory/skin sensitization: Benzyl methacrylate:

No data available

2-hydroxyethyl methacrylate:

Skin: sensitizing

Isobornyl acrylate:

No data available

Urethane (Meth) acrylate oligomer:

No data available

Decyl acrylate:

No data available

Maleic acid:

Skin: sensitizing

Organic acid:

No data available

Repeated dose toxicity: Benzyl methacrylate:

No data available

2-hydroxyethyl methacrylate:

Version 1.0, 21th February 2013

Page 2 of 11

NOAEL (rat, oral):0.5 mg/kg bw

Isobornyl acrylate:

No data available

Urethane (Meth) acrylate oligomer:

No data available

Decyl acrylate:

No data available

Maleic acid:

No data available

Organic acid:

No data available

Germ cell mutagenicity: Benzyl methacrylate:

No data available

2-hydroxyethyl methacrylate:

Ames test: negative

Isobornyl acrylate:

No data available

Urethane (Meth) acrylate oligomer:

No data available

Dec<mark>yl a</mark>crylate:

No data available

Maleic acid:

Ames test: negative

Organic acid:

No data available

Carcinogenicity: No data available

Reproductive toxicity: No data available

Aspiration hazard: No data available

Additional information: No data available

SECTION 12: Ecological information

12.1. Toxicity

Isobornyl acrylate:

May cause long-term adverse effects in the aquatic environment

LC 50 (fish): 1.1-8.2 mg/l (read-across to methyl acrylate, ethyl acrylate and butyl acrylate)

12.2. Persistence and degradability

Isobornyl acrylate:

Version 1.0, 21th February 2013

Page 2 of 11

High (according to Chemwatch)

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal: Observe specific national regulation.

Contaminated packaging: Contaminated, empty containers must be disposed of as chemical waste.

SECTION 14: Transport information

Land transport ADR/RID (cross-border):

ADR/RID Class: 9 Hazard identification 90

(Kemler):

UN Number: 3082 Packing Group: III

Classification Code: M6 Hazard Label: 9

Special provisions: 274 335 601

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Air Transport IATA:

ICAO/IATA Class: 9 ICAO/IATA Subrisk: None

UN/ID Number: 3082 Packing Group:

Special provisions: A97

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. *(contains Isobornyl acrylate)

Maritime Transport IMDG:

IMDG Class: 9 IMDG Subrisk: None

UN Number: 3082 Packing Group: III

Version 1.0, 21th February 2013

Page 2 of 11

EMS Number: F- A , S- F Special provisions: 179 274 335 909

Limited Quantities: 5L Marine Pollutant: Yes

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Isobornyl acrylate)

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety data sheet is in compliance with the following EU legislation and its adaptations – as far as applicable - : 67/548/EEC, 1999/45/EC, 76/769/EEC, 98/24/EC, 92/85/EEC, 94/33/EC, 91/689/EEC, 1999/13/EC.

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. The information contained herein is based on the present state of our knowledge and is intended to describe our product from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Issue Date: 21th February 2013