1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : Hanex Acrylic Joint Adhesive (Component A)

Supplier : HYUNDAI L&C

7F,Center 1building, 26, Eulji-ro 5-gil , Jung-gu, Seoul,04539, Korea

Telephone : +82-2-6364-7812

Telefax : +82-2-6364-7809

Email address : peter@hyundailnc.com

Emergency telephone number : +82-2-6364-7812

Use of the Substance / Preparation : For professional use

Function : Adhering to solid surface

2. HAZARDS IDENTIFICATION



Inflammable



Irritant

Main Hazards

Harmful if swallowed.

Risks of serious damage to eyes.

Health Effects-Eyes

Liquid or mist will cause severe conjunctiva irritation and corneal damage.

Health Effects-Skin

Material may cause irritation, repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis.

Health Effects-Ingestion

Swallowing may have the irritation of mouth, throat and digestive tract, nausea, difficulty with breathing, lung damage.

Health Effects-Inhalation

Low volatility makes acute effects unlikely at ambient temperatures. _

3. COMPOSITION/INFORMATION ON INGREDIENTS

Information on ingredients / Hazardous components

Polymethyl Methacrylate	20~50%	CAS-No.	9011-14-7
Methyl Methacrylate	30~70%	CAS-No.	80-62-6
Alumina Trihydrate	10~30%	CAS-No.	21645-51-2

Xi

R36/37/38-43

4. FIRST AID MEASURES

General advice

Remove contaminated or saturated clothing.

Inhalation

Move to fresh air. Oxygen or artificial respiration if needed. Consult physician after significant exposure.

Skin contact

Wash off immediately with soap and plenty of water.

Eye contact

Rinse thoroughly with plenty of water at least 18 minutes and consult a Physician.

Keep eye wide open while rinsing**.**

Ingestion

Never give anything by mouth to unconscious person. Rinse mouth.

Ingest activated charcoal. Call a physician immediately.

Notes to physician

If required, therapy of irritative effect.

If substance has been swallowed:

Early endoscopy in order to assess mucosa lesions in the oesophagus and stomach which may appear.

If necessary, aspirate leftover substance.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use dry chemical, CO2, Water spray or “alcohol” foam.

Extinguishing media which must not be used for safety reasons

High volume water jet

Special Hazards

This product may give rise to hazardous fumes in a fire.

Protective Equipment

Wear self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Ensure adequate ventilation. Use personal protective equipment.

Remove all sources of ignition.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Soak up with inert absorbent material. Clean with detergents.

Avoid solvents.

7. HANDLING AND STORAGE

Handling

Technical measures/Precautions

Provide sufficient air exchange and/or exhaust in work rooms.

Keep product and empty container away from heat and sources of ignition.

Take precautionary measures against static discharges.

Storage

Technical measures/Storage conditions

Keep container tightly closed.

Keep in a well-ventilated place.

Incompatible products not applicable

Packing material not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Repeated and prolonged exposure to solvents may cause brain and nervous system damage.

It is good practice in industrial hygiene to avoid contact with solvents by using appropriate protective measures whenever possible.

Hand protection

Solvent-resistant gloves

Eye protection

Safety glasses

Hygiene measures

Keep away from food, drink and animal feeding stuffs.

Wash hands before Breaks and at the end of workday.

Exposure controls

National occupational exposure limits

■**methyl methacrylate**

CAS-No. . **80-62-6** EC-No. **201-297-1**

TLV-TWA=100 ml/m3=410 mg/m3/A4/ACGIH (1997)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form:	liquid
Color:	various
Odour:	acrylic
PH: ℃) (at g/l H2O)	not applicable
Flash point:	10℃ closed up
Vapour pressure: (20℃)	39hps
Auto ignition temperature:	430℃
Relative density: (℃)	from 1.20kg/l
	To 1.24kg/l
Solubility:	
Water Solubility (℃)	partly miscible g/l
Viscosity :(℃)	no data available mpa.s
Explosion limits:	-lower 2.1 vol. %
	-upper 12.5 vol. %

10. STABILITY AND REACTIVITY

Conditions to avoid

No decomposition if stored and applied as directed.

Hazardous decomposition products:

Methyl methacrylate monomer

Further information

Vapours are heavier than air and may spread along floors.

Vapours may from explosive mixtures with air.

11. TOXICOLOGICAL INFORMATION

Repeated and prolonged exposure to solvents may cause brain and nervous system damage.

Acute toxicity

Methyl methacrylate

LD50/oral/rac = 7872 mg/kg, RTECS, 47796

Local effects not applicable

12. ECOLOGICAL INFORMATION

Mobility

The product will not dissolve in water.

Persistence/Degradability

The product is expected to be partially or slowly biodegradable.

Bio-accumulation

The product is not expected to bioaccumulation.

Ecotoxicity

No data

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products

Do not allow material to contaminate ground water system.

Contaminated packaging

Can be incinerated, when in compliance with local regulations.

14. TRANSPORT INFORMATION

ADR/RID **UN-NO: 1133**

Class: 3 Item: 5(C) ADR/RID=Labels: 3

TREM-CARD: 30G80 HI/UN NO:

Proper shipping name: Adhesives

ICAO

UN/ID NO: 1133 Class: 3 Sub risks:

Packing group: III ICAO-Labels: Flammable liquid

Proper shipping name: Adhesives

IMO

Class: 3 IMDG Page: 3174 Sub risks:

Packing group: III IMO-Labels: Flammable liquid

Pms: 3 –05 MPAG: 330

Proper shipping name: Adhesives

15. REGULATORY INFORMATION

The product is classified and labeled in accordance with EC-Directive 88/379

Symbol(s):	Xi -irritant, F -Rightly flammable
Contents:	methyl methacrylate
R-phrase:	R11- Rightly flammable
	R/36/37/38-Irritating to eyes, respiratory system and skin
	R43-May cause sensitization by skin contact
S-phrase:	S16-Keep away from source of ignition – No smoking
	S23-Do not breathe vapour
	S24/25-Avoid contact with skin and eyes
	S37-Wear suitable gloves
	S51-Use only in well ventilated areas

16. OTHER INFORMATION

When used in a mixture, read the labels and safety data sheet of all components,
END USE: adhesives.

Do not use in medical applications involving permanent implantation in the human body.

The information provided in this safety data sheet is correct to the best of our knowledge,
Information and belief at the date of its publication. The information given is designed only
As a guidance for safe handling, use, processing, storage, transportation, disposal and release
And is not to be considered a warranty or quality specification. The information relates only to
The specific material designated and may not be valid for such material used in combination
With any other materials or in any process, unless specified in the text.