

Jin Gwang Industry Co., Ltd

1. PRODUCT AND COMPANY IDENTIFICATION

MSDS data revised 27 Jan. 2011

Product Code

Trade Name CONFIAD JOINT ADHESIVE COMPONENT A

Product Type Preparation

Manufacturer/Supplier Jin Gwang Industry Co., Ltd

Address 232-8 Maesan-ri Opo-eup, Gwangju-si, Gyeonggi-do, Korea

Phone Number 82-31-767-8441 Fax Number 82-31-767-8442

2. COMPOSITION / INFORMATION ON THE COMPONENTS

Acrylic Polymer $20\sim40\%$ CAS Number : 9011-14-7 Methyl Methacrylate Monomer $30\sim60\%$ CAS Number : 80-62-6 Alumina Trihydrate $0\sim40\%$ CAS Number : 21645-51-2

3. HAZARD IDENTIFICATION

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 following effects: 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.

4. FIRST AID MEASURES

First Aid-Eyes Immediately flood the eye with plenty of water for at least 15 minutes.

holding the eye open. Obtain medical attention urgently.

First Aid-Skin Wash skin thoroughly with soap and water. Contaminated clothing

should be washed or dry-cleaned before re-use.

First Aid-Ingestion Wash out mouth with water. (Never administer anything by mouth

if a casualty is losing consciousness, is unconscious or is

convulsing). do not induce vomiting.

Keep warm and at rest. If there is difficulty in breathing, give oxygen.

If breathing stops or shows signs of failing,

apply artificial respiration. Do not use mouth to mouth ventilation.

Obtain medical attention urgently.

First Aid-Inhalation Remove from exposure. Keep warm and at rest. If there is difficulty

in breathing, give oxygen. If breathing stops or shows signs of failing,

give artificial respiration.

Advice to Physicians Obtain medical attention. Treat symptomatically.



Jin Gwang Industry Co.,Ltd

5. FIRE FIGHTING MEASURES

Use water spray, alcohol-resistant foam, dry chemical or carbon Extinguishing Media

dioxide. Keep containers and surroundings cool with water spray.

Unsuitable Media Do not use 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

Wear appropriate protective clothing. Personal Precautions

Wear respiratory protection.

Environmental Precautions Try to prevent the material from entering drains or water courses.

Advise Authorities if spillage has entered water course or sewer

or has contaminated soil or vegetation.

Spillages Contain and absorb using earth, sand or other inert material.

Transfer into suitable containers for recovery of disposal.

7. HANDLING AND STORAGE

Respiratory Protection

Ventilation

Keep container tightly closed when not in use. Use in well Handling

> ventilated area. Avoid inhaling vapour. Avoid contact with eyes, skin and clothing. Emergency shower and eye wash facilities

should be readily available.

Storage Storage area should be : cool, dry, well ventilated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Material may cause irritation to mucous membranes, skin burns, Occupational Exposure

eye corrosion and permanent injury. (TLV: 100 ppm)

Engineering Control Engineering methods to prevent or control exposure are preferred.

Measures Methods include process or personnel enclosure, mechanical

ventilation (dilution and local exhaust), and control of process conditions. If engineering controls and work practices are not effective in preventing or controlling exposure, then suitable personal protective equipment, which is known to perform

satisfactorily, should be used.

Respiratory protection if there is risk of breathing mists or vapors

from heated material.

Hand Protection Rubber or polyethylene gloves. Eve Protection

Chemical goggles must be worn during all handling operations. **Body Protection**

> If there is danger of splashing, wear impermeable suit. During application, adequate ventilation must be provided.



Jin Gwang Industry Co., Ltd

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Viscous liquid.

ColorVariousOdorAcrylicBoiling Point 101° CFlash Point (TOC) 10° CIgnition Temperature 430° C

Explosion Limits Lower 2.1%, Upper 12.5%

Solubility in Water Slightly soluble

Vapor Density 3.42 Specific gravity 1.2

Viscosity (CPS) 22,000 / 60,000 at 23°C. (typical)

10. STABILITY AND REACTIVITY

Stability Stable under normal condition.

Condition to avoid Heat, spark, flames and other sources of ignition.

Materials to avoid Oxidizing agents. Air.

Hazardous Decomposition Combustion will generate: oxides of carbon. smoke.

methyl methacrylate monomer.

Hazardous Polymerization Polymer may be formed at high temperature or addition of

oxidizing materials or direct sunlight.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity Harmful by ingestion.

Carcinogenicity NTP: None assigned

JARC: None assigned

OSHA: None assigned

Contact Hazard Moderate

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 bioaccumulate.

Ecotoxicity No data

13. DISPOSAL

Product Disposal Dispose of in accordance with all applicable local and national

regulations. Incineration is the recommended method of disposal.

Container Disposal Empty containers may contain hazardous residues.

Labels should not be removed from containers until they have been cleaned. Contaminated containers must not be treated as household waste. Containers should be disposed of by landfill

or incineration as appropriate.



Jin Gwang Industry Co., Ltd

14. TRANSPORT INFORMATION

*** This information relates to the kit as a whole (Component A, Component B).

ADR / RID - Class UN-NO 1133 Class 3 Item 5(C)

Proper shipping name: Adhesives

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Term—Card R—30G80 ADR/RID Labels: 3

ICAO - Class UN-NO 1133 Class 3 Subrisks

Packing Group II ICAO Labels: Flammable liquid

15. REGULATORY INFORMATION

Labeling Information Warning: Flammable, Irritant.

Contents: Methyl Methacrylate, Alumina Trihydrate Common name: CONFIAD ADHESIVE COMPONENT A

Caution Always wear safety goggles and protective gloves.

Keep away from children.

CONFIAD ADHESIVE should be stored in a cool and dark area. Avoid breathing vapor and use only with adequate ventilation. Keep away from heat, sparks, open flame and other combustible

materials. Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling.

16. OTHER INFORMATION

MSDS first issued 17 December 2001 MSDS data revised 27 Jan. 2011 Revision Highlighted Basic form

We hereby certify that the above statements are true and correct in every respect. If the statements are not true, all responsibility will belong to Jin Gwang Industry Co., Ltd. Signature / Issued Date:

President / Jahng Nyul Kim

V. 712

Jin Gwang Industry Co., Ltd.