

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME **TOUGH COAT D-47**
COMPANY IDENTIFICATION
Company Name **Arbar Industrial Co., Ltd.**
Address **10-1,2-Chome Horimizo, Neyagawa-City, Osaka, Japan**
Department **R&D section**
Person in charge **Manabu Ishikawa**
Telephone **+81-72-812-3491**
Fax **+81-72-812-3492**

2. HAZARD IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

PHYSICAL HAZARDS

*Flammable liquids : Not classified
*Acute toxicity, oral : Not classified
*Acute toxicity, dermal : Not classified
*Acute toxicity, inhalation (gas) : Not classified
*Acute toxicity, inhalation (vapour) : Not classified
*Acute toxicity, inhalation (dust,mist) : Not classified
*Skin corrosion/irritation : Category 3
*Serious eye damage/ eye irritation : Category 2
*Respiratory sensitization : Classification not possible
*Skin sensitization : Category 1
*Germ cell mutagenicity : Classification not possible
*Carcinogenicity : Classification not possible
*Reproductive toxicity : Category 2
*Effects on or via lactation : Classification not possible
*Specific target organ toxicity
 Single exposure : Classification not possible
 Repeated exposure : Classification not possible
*Aspiration hazard : Classification not possible

ENVIRONMENTAL HAZARDS

*Aquatic toxicity (acute) : Category 3
*Aquatic toxicity (chronic) : Classification not possible

GHS LABEL ELEMENTS INCLUDING PRECAUTIONARY STATEMENTS

SYMBOL



SIGNAL WORD : WARNING

HAZARD STATEMENT

* Causes skin irritation
* Causes serious eye irritation
* May cause cancer
* May damage fertility or the unborn child
* Toxic to aquatic life

PRECAUTIONARY STATEMENTS

<Prevention>

1. Use it at a place provided with a local exhaust without fire.
2. Make ventilation better during work of the painting or the drying, and do not breathe in steam.
3. Work not to touch the direct skin at the time of the handling. In addition, wear a tool for breathing protection, protection gloves, protection clothes, protection glasses, a protection mask as needed.
4. Soaking used cloth, paint garbage, the spray duct into water until it is discarded.
5. When paint spilled out the container, wipe off the paint with cloth. Keep the cloth in the water of the container.
6. After the handling, wash hands and gargle thoroughly.
7. Ensure a cover in a container and Store it at places less than 40 degrees Celsius.
8. It is safekeeping out of reach of children.
9. Do not use it other than the original purpose of use/

<Response>

1. When a fire occurs, use carbon dioxide, a bubble or a powdery fire extinguisher.
2. When a material sticks to skin, wash it with much water with soap promptly.
If skin irritation or rash occurs, get medical advice.
3. When a material gets into eyes, wash it with much water promptly.
Consult the doctor as soon as possible afterwards.
4. When handling a material nearby absorbs steam or gas and becomes ill-conditioned, take a rest and get medical advice.

<Disposal>

Handle it as industrial waste at the time of the disposal.

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE / MIXTURE : Mixture

Components & Density

Element	Cas No.	Concentration
Ethyl Acrylate latex	9003-32-1	29%
Propionic acid	79-09-4	2%
Water	7732-18-5	40%
Titanium Dioxide	13463-67-7	8%
Methyl methacrylate	80-62-6	0.5%
Ammonium hydroxide	1336-21-6	0.5%
1,3-Benzenedicarboxylic acid, polymer with 1,4-butanediol, 2,2-dimethyl-1,3-propanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, hexanedioic acid and 1,1-methylenebis(4-isocyanatocyclohexane)	68258-82-2	10%
Calcium carbonate	471-34-1	10%

4. FIRST AID MEASURES

IF INHALED

*When inhale a large quantity of steam or gas, move to the fresh place of the air promptly, and take a rest while maintaining temperature.

When breathing becomes irregular or stops, practice artificial respiration

Prevent swallowing a vomiting thing, and get medical examination promptly

*When handling a material nearby absorbs steam or gas and becomes ill-conditioned, take a rest and get medical advice.

IF ON SKIN

*Wipe off an affix with cloth promptly.

*Wash it with a large quantity of water and soap or a detergent for skin well.

Do not use a solvent and the thinner.

*If skin irritation or rash occurs, get medical advice.

IF IN EYES

- *Wash it under a large quantity of clean running water promptly more than 15 minutes. Completely wash it to the back of eyelids.
- *Get medical advice as fast as possible.

IF SWALLOWED

- *When swallow a material by mistake, take a rest, and get medical examination promptly.
- *Prevent swallowing a vomiting thing.
- *Do not induce vomiting without Doctor permission.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:

Dry chemical powder, CO₂, Foam, Dry sand

EXTINCTION METHOD

- *This product is not inflammables.
- *Wear a tool for appropriate protection (heat-resistant clothing).
- *Move the flammable products around the fire immediately

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- *Wear protective gloves/protective clothing/eye protection/face protection.
- *The product which leaked collects it in an airtight container, and move to the safe place.
- *Adsorbs it to dry sand, soil, other non-inflammable materials, and collect it. When a product leaks in large quantities, a wall prevent further leakage by banking around a leakage point
- *Remove a nearby firing source, a high temperature material and nearby inflammables immediately.
- *For the case of the fire, set up an appropriate fire extinguisher.
- *Collect it using the tool of the materials which a spark does not produce for a shock or static electricity.
- *Process the fouling and waste, etc. based on related regulations.

7. HANDLING AND STORAGE

HANDLING

- *Handle it at the place that ventilation has good.
- *Seal the container tightly each time
- *At the place using the product, it is prohibited the use such as fire, spark, the high temperature material
- *The electric tool grounding it for electrostatic measures using explosion-proof type (added safety type)
- *Use the electric equipment with the spark arrester
- *Soaking a cross after the use, paint refuse, the spray duct in water until the disposal
- *In operation, it is used antistatic working clothes and shoes
- *Operator should wear appropriate protection.
- *Wash hands and face thoroughly after handling. Avoid release contaminated clothing to out of work place.
- *Operator establishes the adequate local exhaust in the closed spot, and should wear appropriate protection.

STRAGE

- *Protect from sunlight. Store in a well-ventilated place.
- *Keep it away from fire, a heat source.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

FACILITY AND EQUIPMENT MEASURES

*facilities handling a product establish explosion-proof type

*Install an exhaust to prevent stay of the steam

*Have grounds about the devices such as a tool for movement or the stirrer of the product.

*Make the handling place facilities without a high temperature and ignition source around.

*When a worker paints it indoors

The worker assumes it the facilities which are not exposed to directly with an automatic painting machine.

Or make the facilities that a worker is kept away from revelation by local exhausts.

*Work at sealing up places such as the tank inside, attach an exhaust, and make ventilation better to the bottom.

CONTROL LIMIT: NIL

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection

*gas mask for organic gas.

*supplied-air respirators (if in sealed up place)

Hand protection

*protective gloves of the materials which an organic solvent or chemicals do not infiltrate

Eye protection

*protective glasses, goggles

Skin and body protection

*Wear the protection tool that skin is not revealed directly by the situation

Other protection

*At the case of electrostatic painting, wear energizing shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance of production

Physical condition	liquid
Color	specified color
Odor	acrylic odor
PH-value	8-9
Flash point(°C)	---
Explosion characteristic(lower bound %)	---
Density(20°C g/cm ³)	0.85

10. STABILITY AND REACTIVITY

STABILITY It stabilizes under the condition of a usual temperature and pressure.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY : N/A

12. ECOLOGICAL INFORMATION

*A leak and the exhaust might affect the environment when not careful about the handling.

A product and scrubbed water avoid flowing out directly to the ground or river, drainage.

13. DISPOSAL CONSIDERATIONS

- *Dispose of contents/container to waste in accordance with local/regional/national/international regulation (to be specified).
- *Do not drain away the water which washed a container, an apparatus device to the ground and a drainage directly.
- *Dispose of washing waste water and the destruction by fire waste according to a law about disposal of waste or the cleaning, or entrust an industrial waste supplier.
- *The destruction by fire disposal of abolished paint control a poisonous gas with the incinerator with an appropriate washing device.

14. TRANSPORTATION INFORMATION

- LAND :Transport it according to the law for the land transportation of a product corresponding to Fire Services Act, Industrial Safety and Health Act, Road Vehicles Law, etc.
- SEA :Transport it according to the law for the marine transportation of a product corresponding to the ship security/safety Law.
- AIR :Transport it according to the law for the air transport of a product corresponding to Aviation Act

United Nations Number: NIL

Special safety measures of the transportation and a condition:

- *Carry protection clothes and a tool, a fire extinguisher
- *Follow the item mentioned of the clause of the attention in item 7. HANDLING AND STORAGE
- *The transportation confirms that do not have the leak of the container, and prevent loading, collapse of cargo not to be damaged by a rollover or a fall

15. REGULATORY INFORMATION

Industrial Safety and Health Act.

- *Article 57 Name display, Quality for notification
methyl methacrylate less than 1%, ammonia water less than 1%

Fire and Disaster Management Act.

*N/A

16. OTHER INFORMATIONS

REFERENCES

- * "Material data base for SDS (for painting)" by Japan Paint Manufacturers Association.(JPMA)
- * "SDS making guide book 【 compound (for paints)】" by Japan Paint Manufacturers Association. (JPMA)
- * "Solvent pocket book" by The Society of Synthetic Organic Chemistry, Japan(SSOCJ)

RIDER

- *This SDS was necessary to use our product definitely and compiled instructions briefly. It applies by general use
- *The content listed in this SDS is made based on information available at present. The evaluation about the risk and the hazardousness please warn the handling enough because information necessarily may not be completely reflected.
- *This SDS may revise it without a notice by revision of the law and new knowledge.
- *This SDS is based on a standard of regulation of Japan and Japan Paint Manufacturers Association.(JPMA)
- *This SDS lists only regulation information of Japan;, therefore, please cope according to the regulation of the organization of the own country concerned.