

First issue : 01-Oct-03
 Revised :
 MSDS No. : A8AT(1-3)

AsahiKASEI
 ASAHIKASEI CHEMICALS

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : ASAHI-KASEI ALUMINIUM PASTE
 HR-21, HR-51, HR-9901, HR-808, HR-6601,
 HR-7000, HR-8801, HR-450, HR-650, HR-850

COMMON NAME : Aluminium Paste
 GENERAL USE : For coating
 PRODUCT DESCRIPTION : Resin coated flaky aluminium pigment in mineral spirit
 and solvent naphtha(petroleum distillate)
 MSDS NUMBER : A8AT(1-3)

COMPANY NAME

Performance Coating Materials Marketing & Sales Dept.
 Performance Coating Materials Division
 Asahi Kasei Chemicals Corporation

ADDRESS : Hibiya-Mitui Bldg., 1-2, Yuraku-cho 1-chome,
 Chiyoda-ku, Tokyo 100-8440, Japan

TELEPHONE NUMBERS: +81-3-3507-2433(9am- 6pm Japan Time M-F)

FAX NUMBER : +81-3-3507-2419

EMERGENCY TELEPHONE NUMBERS

LOCAL CONTACT

See section 16. OTHER INFORMATION

Asahi Kasei Chemicals Corporation

Telephone : +81-3-3507-2433(9a.m.- 6p.m. Japan Time M-F)

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPOSITION

Component	Wt%	CAS No.	TSCA	EINECS No.	OSHA PEL	ACGIH-TLV-TWA
Aluminium Flake	41~58	7429-90-5	On Inventory	231-072-3	15mg/m3(*1)	10mg/m3
Acrylic Polymer	4~9	185800-06-0	*3	*4	---	---
Mineral spirit (*2)	27~45	64742-81-0,	On Inventory	265-184-9	500ppm	100ppm
		64741-68-0	On Inventory	265-070-9		
Solvent naphtha (*2)	0~17	64742-95-6	On Inventory	265-199-0	---	---

*1: Total dust. *2: Stoddard solvent

These solvent ratio are typical value.

*3: To import these products into USA, it is necessary to follow the procedure about PMN exemptions.

*4: Acrylic Polymer is eligible for polymer exemptions.

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3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW : Inflammable solid. Vapor causes irritation of eye and an inflammation of membranes.

APPEARANCE AND ODOR : Metallic aluminium paste, Organic solvent odor.

POTENTIAL HEALTH EFFECTS :

PRIMARY ROUTE OF EXPOSURE

INHALATION : Qualm. Vapor may cause eye and skin irritation.

EYE CONTACT : Irritation.

SKIN ABSORPTION : Inflammation.

INGESTION : Emesis. The ingestion of this material may cause a burning pain in the mouth and throat, vomit, diarrhea, kidney and liver damage.

CHRONIC TOXICITY / CARCINOGENICITY

: Chronic inhalation may affect the respiratory system and result in aluminium pneumoconiosis.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

: Headache, Vertigo, Anemia

4. FIRST AID MEASURES

EMERGENCY FIRST AID MEASURES

: Seek medical assistance for further treatment, observation and support if necessary.

INHALATION : Move to fresh air if difficulty is experienced in breathing and get medical attention immediately.

EYE CONTACT : Flush with plenty of water for at least 15 minutes and get immediate medical treatment.

SKIN CONTACT : Flush with soap and water.

INGESTION : Get medical help immediately to vomit and wash out the aluminium pigment.

NOTE TO PHYSICIAN : Treat symptomatically. Treatment may vary with condition of victim and specifics of incident.

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5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash point and Method : 112° F (44.6°C)(HR-450) (Seta Closed Cup)
110° F (43°C)(HR-850,HR-6601,HR-9901)
(Seta Closed Cup)
Flammable Limits : Flammable as mineral spirit, 1.4% to 7.6% by volume.
Flammable as solvent naphtha, 1.0% to 6.0% by volume.
Auto-ignition Temperature : Not available.

EXTINGUISHING MEDIA : Carbon dioxide, Fire resistant blanket,
Dry fine sand.

NOT QUALIFIED EXTINGUISHING MEDIA : Water.

FIRE FIGHTING INSTRUCTIONS

: Small fires involving aluminium and solvent mixtures
can best be fought by restricting the oxygen supply.
Avoid direct water stream.
Avoid disturbing the burning aluminium.
Wear full lung gear including a positive pressure self-
contained breathing apparatus in any closed space.

6. ACCIDENTAL RELEASE MEASURES

Spills should be removed with non-sparking shovels, soft brooms or brushes having
bristles of natural fibers.

The disposal of any aluminium paste should be discussed with the manufacturer as soon as
possible.

7. HANDLING AND STORAGE

STORAGE : Store away from open fire, heat and humidity at ambient
temperature in a well-ventilated area.
Store indoors and below 104 ° F(40°C).
Store preferably between 59 ° F and 77 ° F (15~25°C).
Do not store in same area as oxidizing agents or combustible
materials.

HANDLING : The precautions usually advised for handling materials
containing flammable solvents should be taken.
Remove from sources of ignitions.
Protect against water, acid and alkaline material.
Wear personal protective equipment as described in section 8.
Workshops should be well ventilated.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS : Use with adequate explosion-proof ventilation to meet exposure limits listed in Section 2.

PROPOSAL PROTECTIVE EQUIPMENT

Respiratory Protection : Respirator for organic solvent.
Eye Protection : Side-sealed protective glasses or goggles.
Skin Protection : Solvent-proof gloves.
Long-sleeved working clothes.

HYGIENIC WORK : When handling aluminium paste do not eat, drink, smoke or snuff. Take off all contaminated clothing. Clean hands with water and soap.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Metallic aluminium paste, Organic solvent odor.
Color : Metallic silver.
Odor : Organic solvent odor.
Boiling Point : 320 ~ 392 ° F (160 ~ 200°C) as mineral spirit.
302 ~ 365 ° F (150 ~ 185°C) as solvent naphtha.
Physical State : Paste(Semisolid).
Vapor Pressure : 2mmHg(Mineral spirit, SI unit →266Pa) at 20°C
Vapor Density : Not available.
Solubility in water : Not soluble in water.
Specific Gravity : 1.1 ~ 1.4
% Volatile : 37 ~ 51 %

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY : Stable
Thermal Stability : Product can release vapors(heavier than air) that can form explosive mixtures with air.
The resulting aluminium flake when disturbed could form a dust cloud.
This cloud could explode if a spark or other ignition source is also present.

CONDITIONS TO AVOID : Avoid store in a warm room.
Store indoors and below 104 ° F(40°C).
Store preferably between 59 ° F and 77 ° F (15 ~ 25°C).

INCOMPATIBILITY WITH OTHER MATERIALS

: Water, Acids, Alkalis, Chlorinated hydrocarbons, Peroxides.

HAZARDOUS DECOMPOSITION PRODUCTS

: Avoid contact with Water, Acids, or Alkalis, to form hydrogen gas.

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11. TOXICOLOGICAL INFORMATION

Not available.

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATION

Dispose of according to local and national laws and regulations.

Do not dump this material into sewers, on the ground or into any body of water.

14. TRANSPORT INFORMATION

US DEPARTMENT OF TRANSPORTATION (DOT)

Hazardous Materials : YES

Hazardous Materials Description and Proper Shipping Name :

ALUMINIUM POWDER, COATED

Technical Shipping Name : ALUMINIUM PASTE

Hazard Class or Division : 4.1 Flammable solids

Identification Number : UN1309

Packing Group (PG) : II

Label Required : 4.1

SEA TRANSPORT

IMDG

Class : 4.1 Flammable solids

Packing Group (PG) : II

UN Number : 1309

Proper Shipping Name : ALUMINIUM POWDER, COATED

AIR TRANSPORT

ICAO/IATA

Class : 4.1 Flammable solids

Packing Group (PG) : II

UN Number : 1309

Proper Shipping Name : ALUMINIUM POWDER, COATED

15. REGULATORY INFORMATION

All components except acrylic polymer (CAS Registry No. 185800-06-0) are on
TSCA(USA) / EINECS(EU) / DSL(Canada) / AICS(Australia) / ECL(KOREA) / PICCS(Philippine)
Inventories.

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China :
All components are on CRC-SEPA Inventory.

TSCA :
Acrylic polymer (CAS Registry No. 185800-06-0) is eligible for PMN exemptions.
(40 CFR 723.250, polymer exemption)
To import these products into USA, it is necessary to follow the procedure about
PMN exemptions.

EINECS :
Acrylic polymer (CAS Registry No. 185800-06-0) is eligible for EINECS polymer
exemptions.

KOREA :
Acrylic polymer (CAS Registry No. 185800-06-0) is eligible for ECL exemptions.
Ensure compliance with all national and local regulations applicable to this material.

16. OTHER INFORMATION

MSDS status : First edition
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For further information, please contact:

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information.

*LOCAL CONTACT