

α Flaw Detection Spray Developer (ALP-TD)	SDS No.	5823
TRUSCO NAKAYAMA CORPORATION	Revision Date	Nov. 25, 2021

SAFETY DATA SHEET(SDS)

※This SDS is translated into English from Japanese.

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name : α Flaw Detection Spray Developer (ALP-TD)
 Company Name : TRUSCO NAKAYAMA CORPORATION
 Address : 28-1 SHINBASHI 4-chome, MINATO-KU, TOKYO, JAPAN
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2 HAZARDS IDENTIFICATION

Hazards Category

Aerosols : Category 1
 Flammable Liquids : Category 2
 Serious Eye Damage/Eye Irritation : Category 2A
 Carcinogenicity : Category 1A
 Reproductive Toxicity : Category 1A
 Specific Target Organ Systemic Toxicity(Single Exposure) : Category 3
 Specific target organ systemic toxicity(Repeated exposure) : Category 1
 Specific target organ systemic toxicity(Repeated exposure) : Category 2
 Hazardous to The Aquatic Environment(Acute) : Category 2
 Hazardous to The Aquatic Environment(Chronic) : Category 2

The one without the description cannot be classified.

Allocation of Label Elements

Pictogram

Flame
 Exclamation mark
 Health Hazard
 Environment



Signal Word

Danger

Hazard Statement

Extremely flammable aerosol
 Pressurized container : may burst if heated
 Highly flammable liquid and vapour
 Cause serious eye irritation
 May cause cancer
 May damage fertility or the unborn child
 May cause harm to breast-fed children
 May cause respiratory irritation; or May cause drowsiness or dizziness
 Causes damage to organs through prolonged or repeated exposure
 May causes damage to organs through prolonged or repeated exposure
 Toxic to aquatic life

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Toxic to aquatic life with long lasting effects

Precautionary Statement

Prevention

Before use, read the safe data sheet (SDS).
 Keep out of reach of children.
 Do not handle until all safety precautions have been read and understood.
 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 Do not spray on an open flame or other ignition source.
 Use explosion-proof electrical/ventilating/lighting/equipment.
 Use only non-sparking tools.
 Take precautionary measures against static discharge.
 Do not burn, even after use.
 Do not breathe dust/fume/gas/mist/vapours/spray.
 Avoid contact during pregnancy/while nursing.
 Wash points of contact thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.
 Wear protective gloves/protective clothing/eye protection/face protection/respiratory protection.

Response

In case of fire : Use dry chemical, carbon dioxide(CO₂), and foam to extinguish.
 IF SWALLOWED : Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.
 IF ON SKIN : Wash with plenty of soap and water.
 If skin irritation or rash occurs : Get medical advice/attention.
 IF INHALED : Remove person to fresh air and keep comfortable for breathing.
 Get medical advice/attention if you feel unwell.
 IF IN EYES : Rinse cautiously with water for several minutes. Get medical advice/attention.
 If exposed or concerned : Get medical advice/attention.
 Take off contaminated clothing.
 Absorb spillage to prevent material damage.
 Collect spillage.

Storage

Store locked up.
 Store in a well-ventilated place. Keep container tightly closed. Keep cool.
 Protect from sunlight. Do not expose to temperatures exceeding 40°C.

Disposal

Dispose of contents /container in accordance with local/regional/national/international regulations.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients and Contents

Component name	CAS number	wt%
Magnesium carbonate hydroxide	12125-28-9	1~5
Ethanol	64-17-5	30~40
Heptane	142-82-5	5~10
Isohexane	101316-67-0(75-83-2/79-29-8/96-14-0/107-83-5)	5~10
Hexane	110-54-3	<1
Siloxanes and silicones, dimethyl, hydroxy terminated, reaction products with silica	102782-80-9	1~5
Alcohols, C12-14-secondary, ethoxylated	84133-50-6	<1
1-Propanol	71-23-8	1~5
Propane	74-98-6	10~20
Butane	106-97-8	30~40

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4 FIRST-AID MEASURES

Inhalation

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a physician if you feel unwell.

Skin

- Wash with plenty of soap and water.
- Call a physician if you feel unwell.

Eye

- Immediately flush eyes with plenty of water for at least 15 minutes.
- Call a physician.

Ingestion

- Rinse mouth. Do not induce vomiting.
- Call a physician.

5 FIRE-FIGHTING MEASURES

Extinguishing Media

- Dry chemical, carbon dioxide(CO₂), and foam

Specific Fire Fighting

- Must not use water to extinguish fires.
- Quickly removed from the surrounding flammable.
- The use of extinguishing agents specified.
- Fire fighting is done from the windward.
- On small fires use carbon dioxide (CO₂) or dry chemical.
- On large fires use dry chemical or foam.
- Sealed containers that are exposed to high temperatures over the water to cool.

Protection for Fire-fighter

- Wear full body protective clothing with breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions

- Wear protective equipments in case of operation.

Environmental Precautions

- Avoid release to the environment.

Methods for Cleaning Up

- Remove potential ignition source in vicinity as soon as possible.
- Prepare extinguishing agent.
- Prevent leakage by enclosing with nonflammables and collect into empty container by scoop or the like.
- Absorbed to non-flammable dry sand, if a large amount of spill to prevent enclosed in embankment.
- If do not stop the leakage from the container, releasing carried away in a place not at risk of being open.
- Spilled material is collected in a container that can be sealed, then remove to safe place.
- Deposits, waste treatment is based on the local regulations.
- Working from the windward, to evacuate people downwind.

7 HANDLING AND STORAGE

Handling

- Use in a well ventilated area.
- Keep away from heat, spark and flames.
- Use spark-proof tools and explosion-proof equipment.

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After handling, wash well hands and face and rinse your mouth.

Facilities storing or utilizing this material should be equipped with an eye wash facility and a safety shower.

Leakage, overflow, to prevent scattering, we do not generate steam in vain.

In the handling area and deny unnecessary entry.

Resting place shall not bring contaminated protective equipment such as gloves.

Wear protective equipments when risk of exposure occurs.

To work in an enclosed area that you work with appropriate protective equipment with a local exhaust ventilation sufficient.

Precautions

Do not breathe vapor or mist.

Handling of the outdoors, as much as possible to work from the windward.

Note is flammable at higher temperatures.

Do not handle in a fire place.

Do not handle in the place more than 40 °C.

Do not use continuously for more than 30 seconds.

Do not store near heat or open flame areas exposed to direct sunlight.

Not want to use toward food and the human body.

Handling Precautions for Safety

Avoid physical damage to containers.

Storage

Fire prohibited strictly.

Do not store in direct sunlight or where more than 40 °C.

Keep away from sources of ignition.

Store in a cool, dry, well-ventilated area away from incompatible substances.

Note that because there is a risk of corrosion and rupture the container is stored in a moisture or humid place.

Store in a tightly closed container.

Safe containers and packaging materials

None in particular.

8 EXPOSURE/PERSONAL PROTECTION

Engineering Controls

Handling equipment is used explosion-proof.

Attach an exhaust device to prevent vapor from staying.

That the equipment and shall become hot, and the source of ignition in the vicinity of the location, such as handling not been placed.

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limit Values

Chemical name	ACGIH
Ethanol	STEL 1,000ppm
Heptane	TWA 400 ppm, STEL 500 ppm
Isohexane	TWA 500ppm, STEL 1000ppm
Hexane	TWA 50ppm
1-Propanol	TWA 100ppm
Propane	TWA 1,000ppm
Butane	TWA -, STEL (1000ppm)

Personal Protective Equipment

Respiratory Protection

Respirator for organic gases

Skin Protection

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Solvent-resistant gloves

Eye Protection

Wear chemical worker's goggles.

Skin and body protection

Such as long-sleeved work clothes

Hygiene measures

Do not eat, drink or smoke during work.

Replacement of the adsorbent, such as the mask is performed each time or use plans.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Liquid (Base liquid)
Color	:	White
Odor	:	Solvent odor
pH	:	Not available
Boiling Point(°C)	:	Not available
Melting Point(°C)	:	Not available
Flash point(°C)	:	-22
Auto-ignition Temperature(°C)	:	Not available
Flammability or Explosive Limits		
Lower	:	Not available
Upper	:	Not available
Vapour Pressure (KPa)	:	Not available
Vapour Density	:	Not available
Relative density(g/cm ³)	:	0.83
Solubility	:	Insoluble in water
Partition Coefficient: n-octanol/water	:	Not available
Decomposition Temperature(°C)	:	Not available

10 STABILITY AND REACTIVITY

Stability

Stable under normal temperatures and pressures.

Reactivity

No self-reactive

Conditions to Avoid

Heat, flames, ignition sources and incompatibles.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and other oxidized substances.

11 TOXICOLOGICAL INFORMATION

Chemical name	Acute toxicity (oral)	Acute toxicity (dermal)	Acute toxicity (inhalation: gas)	Acute toxicity (inhalation: vapour)	Acute toxicity (inhalation: dust, mist)	Skin corrosion / irritation	Serious eye damage / eye irritation
Magnesium carbonate hydroxide	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Ethanol	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Classification not possible	Not applicable to category	Category 2B

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Heptane	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Classification not possible	Category 2	Category 2A
Isohexane	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Hexane	Not applicable to category	Classification not possible	Not applicable to category	Not applicable to category	Classification not possible	Category 2	Category 2A
Siloxanes and silicones, dimethyl, hydroxy terminated, reaction products with silica	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Alcohols, C12-14-secondary, ethoxylated	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible
1-Propanol	Not applicable to category	Not applicable to category	Not applicable to category	Classification not possible	Classification not possible	Not applicable to category	Category 1
Propane	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Classification not possible
Butane	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Classification not possible	Classification not possible

Chemical name	Respiratory/skin sensitizer	Germ cell mutagenicity	Carcinogenicity	Toxic to reproduction	Specific target organs/systemic toxicity following single exposure	Specific target organs/systemic toxicity following repeated exposure	Aspiration hazard
Magnesium carbonate hydroxide	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Ethanol	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Category 1A	Category 1A	Category 3 (respiratory tract irritation, narcotic effects)	Category 1 (liver); Category 2 (central nervous system)	Classification not possible
Heptane	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Classification not possible	Classification not possible	Category 3 (respiratory tract irritation, narcotic effects)	Category 1 (nervous system)	Category 1

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Isohexane	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Hexane	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Not applicable to category	Classification not possible	Category 2	Category 3 (narcotic effects, respiratory tract irritation)	Category 1 (nervous system)	Category 1
Siloxanes and silicones, dimethyl, hydroxy terminated, reaction products with silica	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Alcohols, C12-14-secondary, ethoxylated	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible
1-Propanol	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Not applicable to category	Category 2	Category 3 (narcotic effects, respiratory tract irritation)	Classification not possible	Classification not possible
Propane	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Classification not possible	Classification not possible	Category 3 (narcotic effects)	Classification not possible	Not applicable to category
Butane	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Classification not possible	Classification not possible	Category 3 (narcotic effects)	Classification not possible	Not applicable to category

12 ECOLOGICAL INFORMATION

Chemical name	Hazardous to the aquatic environment (Acute)	Hazardous to the aquatic environment (Chronic)	Hazard to the ozone layer
Magnesium carbonate hydroxide	Classification not possible	Classification not possible	Classification not possible
Ethanol	Not applicable to category	Not applicable to category	Classification not possible

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Heptane	Category 1	Category 1	Classification not possible
Isohexane	Classification not possible	Classification not possible	Classification not possible
Hexane	Category 2	Not applicable to category	Classification not possible
Siloxanes and silicones, dimethyl, hydroxy terminated, reaction products with silica	Classification not possible	Classification not possible	Classification not possible
Alcohols, C12-14-secondary, ethoxylated	Classification not possible	Classification not possible	Classification not possible
1-Propanol	Not applicable to category	Not applicable to category	Classification not possible
Propane	Classification not possible	Classification not possible	Classification not possible
Butane	Classification not possible	Classification not possible	Classification not possible

13 DISPOSAL CONSIDERATIONS

Dispose of contents /container in accordance with local/regional/national/international regulations.

14 TRANSPORT INFORMATION

UN Class

Aerosols, flammable, Class 2.1

UN No.

UN1950

Packing Group

Not regulated.

15 REGULATORY INFORMATION

Follow all regulations in your country.

16 OTHER INFORMATION

References

JIS Z 7253 (2019)

GHS data-base (NITE)

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