Reversion Date : Nov. 9, 2017

Safety Data Sheet

1. IDENTIFICATION

Trade Name (Product Identifier): **TASETO COLOR CHECK FP-S (Penetrant)**

Supplier's Name: TASETO Co., Ltd. Chemical Department
Address : 100-1, Miyamae, Fujisawa, Kanagawa prefecture, JAPAN
Telephone No.: 0081-466-29-5638 (Emergency phone number)
Recommended Use: Dye penetrant inspection
Package: Aerosol

2. HAZARDS IDENTIFICATION

GHS classification

Physical Hazards:	Aerosols	: Category1
	*Except the above physical hazards, classification results is not applicable or classification not possible.	
Health Hazards:	Acute toxicity (Oral)	: Classification not possible
	Acute toxicity (Dermal)	: Classification not possible
	Acute toxicity (inhalation: Gas)	: Classification not possible
	Acute toxicity (inhalation: Vapor)	: Classification not possible
	Acute toxicity (inhalation: Dust and mist)	: Classification not possible
	Skin corrosion / irritation	: Classification not possible
	Eye damage / eye irritation	: Classification not possible
	Respiratory sensitization	: Classification not possible
	Skin sensitization	: Category1
	Germ cell mutagenicity	: Classification not possible
	Carcinogenicity	: Category2
	Reproductive toxicity	: Classification not possible
	Specific target organ toxicity-Single exposure	: Category3 (Narcotic effects)
	Specific target organ toxicity-Repeated exposure	: Classification not possible
	Aspiration toxicity	: Not classified
Environmental Hazards:	Acute hazardous to the aquatic environment	: Category2
	Long hazardous to the aquatic environment	: Category3
	Hazard to the ozone layer	: Classification not possible

GHS label elements

Hazard pictograms:	
Signal word:	Danger
Hazard statements:	Extremely flammable aerosol Pressurized container: may burst if heated May cause an allergic skin reaction Suspected of causing cancer May cause drowsiness or dizziness Toxic to aquatic life Harmful to aquatic life with long lasting effects

Precautionary statements:	[Prevention] Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe gas / mist / vapours / spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment if this is not the intended use. Wear protective gloves / protective clothing / eye protection / face protection. [Response] IF SWALLOWED: Immediately call a POISON CENTER / doctor. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of water and soap. If skin irritation or rash occurs: Get medical advice / attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER / doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice / attention. IF exposed or concerned: Get medical advice / attention. [Storage] Keep out of reach of children. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50 ℃ / 122 ℉. [Disposal] Dispose of contents / container in accordance with local / regional / international regulations.

3. COMPOSITION / INFORMATION on INGREDIENTS

Ingredient	wt%	CAS No.	LD_{50}	TLV
Azo oil-solubility dyestuff	1 ~ 5	—	> 5,000 mg/kg (rat, oral)	Not avail.
High boiling point ester	25 ~35	—	> 3,200 mg/kg (rat, oral) > 15,000 mg/kg (marmot, dermal)	Not avail.
Mineral oil	25 ~ 35	—	> 5,000 mg/kg (rat, oral) > 2,000 mg/kg (rat, dermal)	5 mg/m^3 (TLV-TWA)
Diethylene glycol monobuthyl ester	5 ~ 10	112-34-5	> 5,000 mg/kg (rat, oral) 2,764 mg/kg(rabbit, dermal)	10 ppm (IFV) (TLV-TWA)
Petroleum naphtha	< 2.0	64742-94-5	> 2,000 mg/kg (rat, oral) > 2,000 mg/kg (rabbit, dermal)	Not avail.
Naphtalene	< 1.0	91-20-3	490 ~ 1,800 mg/kg (rat, oral) > 2,000 mg/kg (rabbit, dermal)	10 ppm (TLV-TWA)
Propellant LPG: Propane	5 ~ 10	74-98-6	—	Asphyxia
Butane	20 ~ 25	75-28-5 106-97-8	—	1,000 ppm (TLV-STEL)

4. FIRST-AID MEASURES

IF INHALED:	Remove person to fresh air and keep comfortable for breathing.	
	Get medical advice / attention if you feel unwell.	
IF ON SKIN:	Take off contaminated clothing.	
	Wash skin immediately.	
	Wash with plenty of water and soap.	
	If skin irritation occurs: Get medical advice / attention.	
	Get medical advice / attention if you feel unwell.	
	Wash contaminated clothing before reuse.	
IF IN EYES:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.	
	Continue rinsing.	
	If eye irritation persists: Get medical advice / attention.	
	Get medical advice / attention if you feel unwell.	
IF SWALLOWED:	Rinse out a mouth.	
	Do not let me vomit forcibly.	
	Get medical advice / attention.	
	Get medical advice / attention if you feel unwell.	
The most important acute and tardive symptoms:	IF INHALED:	Dizziness, Headache, Nausea
	IF ON SKIN:	Drying, Flare
	IF IN EYES:	Flare, Pain
	IF SWALLOWED:	Dizziness, Headache, Nausea
Protection of the person taking a step temporarily:	The rescuers wear a tool for appropriate protection depending on the situation.	
	Be careful about fire.	

5. FIRE-FIGHTING MEASURES

Extinguishing media:	Fog-formed reinforcement liquid, powdery extinguishant, carbon dioxide, fire foam, dry sand
	Use powder, carbon dioxide extinguishant for an early fire.
	In the case of a large-scale fire, it is effective using fire foam to intercept air.
Inappropriate Extinguishing media:	Stick drainage
Special danger hazardousness about the measures at the time of the fire:	It is a flammable liquid.
	By heating, a container might explode.
	By a fire, it might produce irritating, toxic or corrosive gas.
	Explosive air-fuel mixture might be produced air steam by heating. In indoor, outdoor or a sewer, there is the risk of the steam explosion.
Special fire extinguishing method:	Move a container from the fire area if not dangerous.
	When you cannot move a container, Water a container and outskirts, and cool off.
	After having extinguished a fire, cool a container using plenty of water enough.
Protection of the person extinguishing a fire of:	On the occasion of fire extinguishing work, wear appropriate air respiratory organs, protection clothes for the chemistry.

6. ACCIDENT RELEASE MEASURES

Notes on human body / Protective equipment and emergency measures:	Immediately isolate the appropriate distance in all directions as leakage area.
	Prohibition of entry and exit of unrelated persons and unprotected persons in leakage areas.
	Do not touch spills or walk in it.
	Workers should wear appropriate protective equipment (refer to "8. EXPOSURE CONTROLS／PERSONAL PROTECTION") to avoid contact with the eyes, skin and inhalation.
	Do not touch broken containers or spills when not wearing proper protective equipment.
	Stay on the windward.

	Leave the lowland.
	Ventilate the sealed area.
Notes on the environment:	Be cautious so that it will be discharged to rivers and others and not affect the environment.
	Do not release into the environment
Containment and purification methods / equipment:	In case of small amount, collect with dry embankment, sand or incombustible material, cover it up in an empty container that can be closed.
	In case of small amount, when collecting absorbed, use a clean antistatic tool.
	In case of large quantity, enclose it in embankment to prevent outflow, guide to safe place to collect.
	Stop the leak if there is no danger.
	All equipment used when handling spills should be grounded.
Measures to prevent secondary disasters:	Quickly remove all ignition sources (smoking in the vicinity, prohibition of fireworks and flames).
	Prevent drainage into ditches, sewer grooves, basements or closed places.

7. HANDLING AND STORAGE

Handling:	Technical measures:	Perform facilities measures listed in "8. EXPOSURE CONTROLS ／ PERSONAL PROTECTION", and wear a tool for protection.
		When you deal with quantity more than designated amount, perform it in a factory, a bank, a handling place satisfying a standard established by law.
		Avoid contacting with heat, fireworks, flame or a high temperature. Do not let me emit steam abusively. No smoking.
	Local exhaust / whole ventilation:	Refer to "8. EXPOSURE CONTROLS／PERSONAL PROTECTION".
	Safe handle instructions:	Do not handle until all safety precautions have been read and understood.
		Prohibit the high temperature thing, spark and using of the fire at outskirts.
		Do not let a container turn over and drop and give a container shock, and trail a container.
		Do not swallow, contact and inhale.
		Do not inhale gas, mist, steam, spray.
		Use only outdoors or in a well-ventilated area.
	Contact evading:	Refer to "10. STABILITY AND REACTIVITY".
	Hygiene measures:	Do not eat, drink or smoke when using this product.
		After handling, wash hands and a face well, and gargle.
		Take off the wet clothing, and reuse it after completely washing it.
		Check the tool of protection by a check list regularly.
Storage:	Technical measures:	The storage area loses a wall, a pillar, a floor with fire-resistant structure.
		The storage area is made a roof with flaming retardant materials. Make in metal plate or other lightweight flaming retardant materials, and do not establish the ceiling.
		Assume it structure that water invades in the floor of the storage area and does not penetrate.
		Assume the floor of the storage area the structure that dangerous materials do not spread among. And give it an appropriate slope, and arrange the appropriate pool.
		Establish the facilities of necessary lighting, illumination and the ventilation in the storage area to store dangerous materials, and to handle it.
	Safety storage condition:	Keep it from the firing source such as heat, fireworks, naked light apart. –No smoking.
		Keep it from halogen, strong acid, alkali, an oxidizing material apart.
		Avoid direct rays of sun and fire at container.
		Seal up container, and keep it at a good place of the ventilation.
		Do not pressure a container. You might be damaged when you pressure a container.
	Safe wrapping:	Use a container prescribed by the Fire Services Act and the United Nations transportation law.

8. EXPOSURE CONTROLS／PERSONAL PROTECTION

Allowable density	ACGIH (2015)	TLV-TWA	5 mg/m^3	Mineral oil
(Revelation limit value)		TLV-TWA	10 ppm (IFV)	Diethylene glycol monobuthyl ester
		TLV-TWA	10 ppm	Naphthalane
		TLV-STEL	1,000 ppm	Butane
			Asphyxia	Propane

Facilities measures: Use explosion-proof electricity, ventilation, an illumination apparatus.
Take precautionary measures for the static electricity.
Install a washing eyes device and a safe shower in the storage to the workshop to handle with this material.
In the case of the handling in the room, become the sealing up of the emission source, or install a local exhaust.
Perform ventilation for the exhaust to keep a value of the atmospheric density recommended allowable density or less.

A tool of protection:

For breathing:	Depending on the situation, use a gas mask for the organic gas, a supply of air mask, air respiratory organs.
For hands:	Wear appropriate protection gloves (impermeable protection gloves).
For eyes:	Wear a tool for protection of appropriate eyes. Protection glasses (normal glasses type, side starting performing before the curtain rises normal glasses type, goggles type)
For skin and physical:	Wear a tool for protection such as protection boots, the oiliness (for preventive measures against imperviousness, static electricity) apron, hazmat suit (for preventive measures against static electricity)-resistant.

9. PHSICAL AND CHEMICAL PROPERTIES

Appearance:	Red color liquid	Flash point(Bulk) :	> 70℃
Density／sp. Gravity (Bulk):	0.86	Boiling point (Bulk):	not avail.
pH:	not avail.	Water solubility:	Insoluble in water.
Odor:	Oil smell	Evaporation rate:	not avail
Vapor density:	not avail.	Vapor pressure:	not avail.

Jet agent: LPG	Propane	Butane
Melting point / Freezing point	: -190 ℃	-138 ~ -160 ℃
Boiling point	: -42 ℃	-0.5 ~ -11.7 ℃
Flash point	: -104 ℃	-56 ~ -60 ℃
Explosion limit	: 2.1 ~ 9.5 vol%	1.8 ~ 8.4 vol%
Vapor density (air =1)	: 1.6	2.07

10. STABILITY AND REACTIVITY

Stability:	Stable under the normal condition
Dangerous adverse effect possibility:	It reacts with a strong oxidizer intensely and poses the danger of a fire and the explosion.
The condition that you should avoid:	The firing source such as a high temperature, a flame, the spark
Blend most moving passage hazardous substance:	Halogen, strong acids, alkali, oxidizer material
Dangerous harmful decomposition product:	By hydrolysis and combustion, it produces carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity (Oral) : Classification not possible
Azo oil-solubility dyestuff: LD_{50} (rat) > 5,000 mg/kg
Mineral oil: LD_{50} (rat) > 5,000 mg/kg
High boiling point ester: LD_{50} (rat) > 3,200 mg/kg
Diethylene glycol monobuthyl ester: LD_{50} (rat) > 5,000 mg/kg
We have judged that it is "Classification not possible" because it contains ingredients of unknown toxicity.

Acute toxicity (Dermal) : Classification not possible
Mineral oil: LD_{50} (rat) > 2,000 mg/kg
High boiling point ester: LD_{50} (marmot) > 15,000 mg/kg
Diethylene glycol monobuthyl ester: LD_{50} (rabbit) 2,740 mg/kg
We have judged that it is "Classification not possible" because it contains ingredients of unknown toxicity.

Acute toxicity (inhalation: Gas) : Classification not possible
Propane: LC_{50} 277,374 ppm/4h (rat) ACGIH (7th, 2001)
Butane: LC_{50} > 55,000 ppm/2h (marmot) ACGIH (7th, 2001)

Acute toxicity (inhalation: Vapor) : Classification not possible
There is not useful information and cannot classify it.

Acute toxicity (inhalation: Dust and mist) : Classification not possible
There is not useful information and cannot classify it.

Skin corrosion/irritation : Classification not possible
There is not useful information and cannot classify it.

Eye damage / eye irritation : Classification not possible
Diethylene glycol monobuthyl ester: Category2A (IUCLID(2000))
Because 10% of ingredients classified in Category2A were less than it, and an unknown ingredient was included in the toxicity, we judged it with "Classification not possible".

Respiratory sensitization : Classification not possible
There is not useful information and cannot classify it.

Skin sensitization : Category1
The ingredient classified in Category1 is more than 0.1 %.

Germ cell mutagenicity : Classification not possible
There is not useful information and cannot classify it.

Carcinogenicity : Category2
The ingredient classified in Category2 is more than 0.1 %.

Reproductive toxicity : Classification not possible
There is not useful information and cannot classify it.

Specific target organ toxicity-Single exposure : Category3 (Narcotic effects)
Diethylene glycol monobuthyl ester: Category2 (Central nervous system)
(DFGOT VII (1992))
Propane: Category3 (Narcotic effects) (ACGIH (7th, 2001))
Butane: Category3 (Narcotic effects)
(ACGIH (7th, 2001), DFGOT vol.20 (2003), PATTY (4th,1994))
The ingredient classified in Category2 is less than 10% more than 1%.
The ingredient classified in Category3 (Narcotic effects) is more than 20%.

Specific target organ toxicity-Repeated exposure : Classification not possible
There is not useful information and cannot classify it.

Aspiration toxicity : Not classified
Because a product is atomized in the state of the mist, aerosol does not usually correspond.

12. ECOLOGY INFORMATION

Habits toxicity: Acute hazardous to the aquatic environment : Category2
High boiling point ester: Category2
(M ×10 ×Acute1) + Acute2 ≧ 25 %

Long-term hazardous to the aquatic environment : Category3
(M ×100 ×Chromic1)
+ (10 ×Chronic2) + Chronic3 ≧ 25 %

Residual property / Degradability : No data

Bioaccumulation characteristics	: No data
Mobility to soil	: No data
Hazards to the ozone layer	: Not classified

13. DISPOSAL CONSIDERATIONS

Material Disposal:	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drain or in water courses. Waste product should not be allowed to contaminate soil or water.
Container Disposal:	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send to drum recover or metal reclaimer.
Local Legislation:	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be in compliance.

14. TRANSPORT INFORMATION

IMDG: General Index	**Aerosol**
UN No. :	1950
Proper shipping name:	Aerosols
Hazard class or Division:	2.1
Packing Group	—

15. REGULATORY INFORMATION

Follow all regulations in your country.

16. OTHER INFORMATION

Safety data sheets are provided as reference information on the safe handling of hazardous or harmful materials to companies using such materials.

When referring to this data sheet, companies should remember that they must take responsibility for implementing the proper measures for their own particular situations.

This data sheet is not a guarantee of safety and is prepared to provide all the information that we understand now. It may have other dangers that are not written in this sheet.