Safety Data Sheet

Reference number: OCIQL201811-100 Issue date: December 13, 2016
Revision date: June 1, 2019

1.	Product and company identification	Product name	: EAT-OC-FD-BK (OC Color FD-BK) EAT-OC-FD-LBK (OC Color FD-LBK) EAT-OC-FD-M (OC Color FD-M) EAT-OC-FD-LM (OC Color FD-LM) EAT-OC-FD-Y(OC Color FD-Y) EAT-OC-FD-C (OC Color FD-C) EAT-OC-FD-LC(OC Color FD-LC) Cleaning agent EAT-OC-CL
		Company name	: OCI CO., LTD.
		Address	: 4-3-6, Takatsukadai, Nishi-ku, Kobe, 651-2271 Japan
		Department (Person) in charge	: Quality Assurance Department
		Phone number	: 078-992-1106
		Fax number	: 078-992-1108
		Contact	: Same as above
2	Hazards identification	GHS classification	N/A as compound
		Skin corrosion/irritation	: Category 3 [GHS Classification] (glycerin information)
		Serious eye damage/irritation	: Category 2B (glycerin information)
3	Composition/information on ingredients	Discrimination of single substance or mixture	: Mixture
		Common chemical name or general name	: Food additive, Coloring agent formulation effective colors; 7 colors Food additive, Food machinery cleaning agent (cleaning agent EAT-OC-CL)
		Composition and content	: As shown in the table below

Product name	EAT-OC -FD-BK	EAT-OC -FD-LB K	EAT-OC -FD-M	EAT-OC -FD-LM	EAT-OC -FD-Y
Effective color	Black	Light black	Red	Light red	Yellow
Material name	Content%	Content%	Content%	Content%	Content%
Food Red No.40 (Allura Red AC)	2.60	0.65	3.00	0.75	-
Food Red No.3 (Erythrosine)	0.40	0.10	1.00	0.25	-
Food Blue No.1 (Brilliant Blue FCF)	1.60	0.40	0.05	0.01	-
Food Yellow No.4 (Tartrazine)	0.40	0.10	-	-	5.00
Glycerin	15.00	15.00	15.00	15.00	15.00
Propylene glycol	15.00	15.00	15.00	15.00	15.00
Polysorbate 80	0.20	0.20	0.20	0.20	0.20
Water	64.80	68.55	65.75	68.79	64.80

Product name	EAT-OC-FD-C	EAT-OC-FD-LC	EAT-OC- CL	CAS No.	JCSCA No.
Effective color	Blue	Pale blue	Colorless transparent		
Material name	Content%	Content%	Content%		
Food Red No.40	-	-	-	25956-17-6	N/A
Food Red No.3	-	-	-	16423-68-0	5-1503
Food Blue No.1	3.00	0.75	-	3844-45-9	5-1732
Food Yellow No.4	-	-	-	1934-21-0	5-1402
Glycerin	15.00	15.00	-	56-81-5	(2)-242
Propylene glycol	15.00	15.00	19.00	57-55-6	(2)-234 Priority assessment
Polysorbate 80	0.20	0.20	-	9005-65-6	8-55
Water	66.80	69.05	81.00	7732-18-5	-

4 First aid measures

If in eye : Immediately flush eyes with clean water for at least 15 minutes.
If on skin : Immediately flush with clean water or lukewarm water.
If inhaled : Immediately remove the victim to fresh air.
If swallowed : Rinse mouth. May give 1-2 glasses of milk or water to dilute in the stomach. Then, contact a doctor and seek medical help if needed.

5 Fire-fighting measures

Extinguishing media : Water, sand, extinguishing powder, carbon dioxide, foam
Prohibited media : None
Specific methods of fire-fighting : Combustion gas contains toxic gases such as carbon monoxide, and avoid smoke inhalation when extinguishing a fire.
Fire-fighting instruction : Cut off the combustion source and use an extinguishing agent to extinguish the fire. Move containers from the fire area immediately if it can be done without risk. Use water spray to keep fire-exposed containers cool.
Protection of fire-fighters : Firefighters should wear appropriate protective equipment.

6 Accidental release measures

Personal precautions : Ventilate well indoors until the work is finished. Use appropriate personal protective equipment during the operation to avoid skin contact, splash, etc., and inhalation of dust and gas.
Environmental precautions : Prevent the products from being released into sewers or rivers that may affect the environment. Prevent contaminated wastes from being released into the environment without appropriate treatment.
Methods of cleaning up : Immediately remove adjacent ignition sources and collect leaked and spilled liquid as much as possible. A small amount is collected by wiping it up with a waste cloth. Wash away the remainder with plenty of water. Incinerate contaminated clothes immediately in small quantities.

7 Handling and storage

Handling
Technical measures : Do not use in areas without ventilation.
Precautions : Close the container tightly after use. Avoid leakage, overflow, dispersal and generating steam without any good reason. Avoid improper handling like tipping over, dropping, strong impact to or dragging the container.
Precautions for safe handling : Desirable to wear appropriate protective equipment to prevent inhalation or contact with eyes, skin, and clothing.
Storage : Store in a cool, dark place.
Storage conditions : After opening the container, seal it immediately and store it in a refrigerated dark place. Avoid frozen.

8 Exposure controls/personal protection	Personal protective equipment	: It is not particularly necessary for normal handling, but desirable to wear.
	Respiratory protection	: Gas mask
	Hand protection	: Protective gloves
	Eye protection	: Safety glasses
	Skin and body protection	: Protective boots, protective clothing
9 Physical and chemical properties	Physical properties	: Liquid
	Physical state	: Each effective color (3 compositions; described in information on ingredients) Colorless transparent (cleaning agent EAT-OC-CL)
	Color	: Characteristic odor
	Odor	: 5.5 to 7.5 (EAT-OC-FD-BK and other 6 types), 5.5 to 8.0 (EAT-OC-CL only)
	pH	
	Specific temperatures /temperature ranges at which changes in physical state occur	: No data available
	Flash point	: No data available
	Explosion properties	: No data available
	Specific gravity	: Approx. 1.0 to 1.1
10 Stability and reactivity	Solubility	: Soluble in water
	Stability	: Stable under normal conditions of use
	Reactivity	: No data available
	Conditions to avoid	: Sunlight, heat, high temperature
	Hazardous decomposition products	: Toxic gases (carbon monoxide, nitrogen oxides, sulfur oxides) may be generated when incinerated.

11 Toxicological information

Acute toxicity

Material name	Toxicological information
Food Red No.40 (Allura Red AC)	Oral Mouse LD50 > 10,000 mg/kg Dermal Rabbit LD50 > 10,000 mg/kg Oral (forced feeding) Dog LD50 > 5,000 mg/kg
Food Red No.3 (Erythrosine)	Oral Mouse LD50 6,800 mg/kg Oral Rat LD50 > 2,700mg/kg Oral Rat LD50 7,100mg/kg Intravenous Rabbit LD50 200mg/kg
Food Blue No.1 (Brilliant Blue FCF)	Rat Oral LD50 >2g/kg
Food yellow No.4 (Tartrazine)	No information
Glycerin	Oral: Not classified because of Rat LD50 = 27,200mg/kg (SIDS) Dermal: Not classified because it is used in cosmetics, medicines for external application, etc. and has low toxicity. Inhalation (mist): No data available. Inhalation produces low irritation to the mucous membrane of throat, trachea and nose.
Propylene glycol	Rat Oral LD50 > 20,000 mg/kg Rabbit Dermal LD50 20,800 mg/kg(male)
Polysorbate 80	Rat Oral LD50 = 25g/kg

Skin corrosion/irritation

Material name	Toxicological information
Food Red No.40 (Allura Red AC)	No information
Food Red No.3 (Erythrosine)	No information
Food Blue No.1 (Brilliant Blue FCF)	No information
Food Yellow No.4 (Tartrazine)	No information
Glycerin	Category 3 (GHS classification) based on Rabbit 500mg/24H Mild However, it is not classified in JIS Classification.
Propylene glycol	No information
Polysorbate 80	No information

Severe eye damage/irritation

Material name	Toxicological information
Food Red No.40 (Allura Red AC)	No information
Food Red No.3 (Erythrosine)	No information
Food Blue No.1 (Brilliant Blue FCF)	No information
Food Yellow No.4 (Tartrazine)	No information
Glycerin	Irritation Category 2B based on Rabbit 126mg/24H Mild
Propylene glycol	No information
Polysorbate 80	Category 2B based on Mild results of rabbit eye irritation test (RTECS). Eye irritation (Category 2B)

Respiratory or skin sensitization: No information
Germ cell mutagenicity: No information

Reproductive toxicity

Material name	Toxicological information
Food Red No.40 (Allura Red AC)	No information
Food Red No.3 (Erythrosine)	No information
Food Blue No.1 (Brilliant Blue FCF)	No information
Food Yellow No.4 (Tartrazine)	No information
Glycerin	Not classified because in a two-generation oral reproductive toxicity study in rats, no effects are observed on sexual function and fertility in adult rats and on reproductive indicators in postnatal rats. In addition, no teratogenicity was observed in an oral administration study in rabbits, rats, and mice in periods including their organogenic stage (JETOC).
Propylene glycol	No information
Polysorbate 80	No information

Specific target organ systemic toxicity (single exposure): No information

Carcinogenicity

Material name	Toxicological information
Food Red No.40 (Allura Red AC)	No information
Food Red No.3 (Erythrosine)	No information
Food Blue No.1 (Brilliant Blue FCF)	No malignant tumor was observed in mice when mice were fed with a diet including this coloring agent 1mg/day for 500 to 700 days.
Food yellow No.4 (Tartrazine)	No information
Glycerin	Not listed (IARC, ACGIH, NTP, EPA)
Propylene glycol	No information
Polysorbate 80	Not listed (IARC, ACGIH, NTP, EPA)

Specific target organ systemic toxicity (repeated exposure)

Material name	Toxicological information
Food Red No.40 (Allura Red AC)	No embryotoxicity or fetotoxicity was observed at any of the administration paths evaluated either when this coloring agent was administered orally (intubation) to Osborne-Mendel rats during gestation days 0-19 in a rate of 5, 7, 15, 30, 100, and 200mg/kg/day or when a 0.2% water solution of this coloring agent was administered daily in drinking water to Osborne-Mendel rats during gestation days 0-20 (equivalent to 230.2mg/kg/day).
Food Red No.3 (Erythrosine)	No tumor was observed in an injected site or other sites when 1ml of 2% or 3% solution of this coloring agent was injected subcutaneously into 18 rats for weeks 94-99.
Food Blue No.1 (Brilliant Blue FCF)	No information
Food Yellow No.5 (Tartrazine)	No abnormality was observed when effects on mortality, development, intake, hematologic findings, and tumor development were monitored in the study where the groups of 60 male and 60 female mice were fed with diets containing 0.5, 1.5, and 5.0% concentrations of this coloring agent for 24 months.
Glycerin	No adverse effects were observed in the two-year oral administration study in rats, with NOEL = 1000 mg/kg and a dose 10 times the upper limit of the guidance value of Category 2. In addition, a 13-day absorption study in rats showed mild squamous metaplasia in the airway (epiglottis) with local stimuli at doses of 0.662mg/L which exceeds the upper limit of the guidance value of Category 2. Still, no significant toxic effects or other significant toxic effects were observed (JETOC). Based on the above, not classified.
Propylene glycol	No information
Polysorbate 80	No information

Aspiration hazard: No information

: There is almost no effect in normal handling, but if on the skin or in the eye, follow first aid measures in Section 4.

12	Ecological information	Ecological information	: Not classified Estimated low toxicity. Prevent the products from being released into sewers or rivers that may affect the environment.
13	Disposal considerations Remaining wastes		: Spray into the incinerator fire chamber and incinerate. If a small amount, absorb with sawdust, waste cloth, etc., and incinerate contaminated clothes in small quantities. The wastewater, including the products, is purified by the activated sludge process, etc., before disposal.
		Containers and packages	: If any products remain in the container, remove them, rinse the container with water, and incinerate it in small quantities. : No data available
14	Transport precautions	International restrictions Precautions	: When transporting, make sure the container is not leaked. Avoid collision, tipping, falling, or damage while loading.

15 Regulatory information

Food Sanitation Act	: Because the products have not undergone inspections by the relevant authority, they cannot be used in food products in Japan. (Except EAT-OC-CL)
Example of food labeling	: Check for each country.
U.S. FDA	: Compatible materials are used for each synthetic dye
Fire Service Act	: N/A
Poisonous and Deleterious Substances Control Act	: N/A
Industrial Safety and Health Act	: N/A
Ship Safety Act (regulations for the carriage and storage of dangerous goods in ship)	: N/A
Civil Aeronautics Act	: N/A
Pollutant. Release and Transfer Register Act (PRTR)	: N/A
Act for the Prevention of Marine Pollution and Maritime Disasters	: Noxious liquid substance category Z (for glycerin and propylene glycol) Noxious liquid substance category Y (for polysorbate 80)
Cabinet Order on Export Trade Control	: Appendix 1, Section 16 (catch-all control) Chapter 29 Organic chemicals (for glycerin and propylene glycol) Chapter 34 Organic chemicals (for polysorbate 80)

16 Other

Use as a food coloring agent for export to the U.S. The coloring agents used in the products have been approved by the U.S. Food and Drug Administration (FDA) but have not been inspected by the relevant authorities in Japan. Using them in foods for domestic use in Japan constitutes a violation of the Food Sanitation Act. Please be careful with the management of the products.

The information above is a reference representing the best available information. We make any warranty, express or implied, concerning such information,
In addition, the precautions apply only to normal handling, and in the case of special handling, please take appropriate safety measures for use or purposes.
The information contained herein may be revised according to new findings.