WTH24H04085214C

Safety Data Sheet (SDS)

SDS No..... : WTH24H04085214C

Applicant..... : Hunan Sijiu Technology Co., Ltd.

Address..... : No. 1401, 14th Floor, Building E7, Phase II, CEC Software Park, No. 18 Jianshan Road, Dongfanghong Street, Xiangjiang New Area, Hunan Province

Sample Name..... : Heat Transfer Paper

According Regulations.. : Regulation (EC) No 1907/2006, Annex II and its amendment Regulation (EU) 2020/878

Date of Issue..... : 2024-4-22

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SECTION 1 Identification of the substance / mixture and of the company / undertaking

1.1 Product Identifier

Product name	Heat Transfer Paper
UFI	Not provided

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Fabric customization; For decoration

1.3 Details of the supplier of the safety data sheet

Manufacture/Supplier	Hunan Sijiu Technology Co., Ltd.
Address	No. 1401, 14th Floor, Building E7, Phase II, CEC Software Park, No. 18 Jianshan Road, Dongfanghong Street, Xiangjiang New Area, Hunan Province
Telephone	15796458852
Fax	--
Email	tara@sijiutech.com
Export to	EU
Transport fashion	Air, sea, rail, highway

1.4 Emergency telephone number

Emergency telephone numbers	15796458852

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

Summary of Hazard in an Emergency Situation

Solid. Does not mix with water. Combustible.

Irritating to respiratory system.

Classification	Not Applicable

2.2 Label elements

Hazard pictogram(s)	Not Applicable
Signal word	Not Applicable

Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

Physical and Chemical Hazard

Solid. Does not mix with water. Combustible.

Toxic smoke/fumes in a fire.

Health Hazards

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion".
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact
Eye	The material is not thought to be an irritant
Chronic	There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population.

Environmental Hazards

See Section 12

2.3 Other hazards

Not Applicable

SECTION 3 Composition / information on ingredients

Substances/Mixtures

Ingredient Name	CAS No.	EC No.	Content (%)
Wood pulp paper	9004-34-6	232-674-9	55
2-methyl methacrylate	25852-37-3	630-433-6	15

polymer with butyl acrylate			
Water	7732-18-5	231-791-2	20
Titanium dioxide	13463-67-7	236-675-5	10

SECTION 4 First aid measures

4.1 Description of first aid measures

Eye Contact	If your eyes come into contact with this product: rinse immediately with running water. By lifting the upper and lower eyelids from time to time, ensure that the eyes are thoroughly washed. If the pain persists or recurs, seek medical attention immediately. Contact lenses can only be removed by specially trained personnel after an eye injury.
Skin Contact	If in contact with skin or hair: rinse skin and hair with running water (if possible, soap) . If you feel stimulated, seek medical attention.
Inhalation	If smoke or combustion products are inhaled, remove the patient from the contaminated area. Lay the patient on his back, keeping him warm and resting. If possible, remove prostheses such as dentures before starting first aid to prevent blockage of the respiratory tract. If breathing stops, it is best to use a respirator with a globe valve or bag valve mask or pocket mask. Cardiopulmonary resuscitation if necessary. Take the patient to a hospital or hospital immediately.
Ingestion	Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

This product is not classified as harmful to human health.

4.3 Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs, consult a doctor.

SECTION 5 Firefighting measures

5.1 Extinguishing media

Foam.

Dry chemical powder.

BCF (where regulations permit).
Carbon dioxide.
Water spray or fog - Large fires only.

5.2 Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

5.3 Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%) - according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions). Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited - particles exceeding this limit will generally not form flammable dust clouds; once initiated, however, larger particles up to 1400 microns diameter will contribute to the propagation of an explosion. In the same way as gases and vapours, dusts in the form of a cloud are only ignitable over a range of concentrations; in principle, the concepts of lower explosive limit (LEL) and upper explosive limit (UEL) are applicable to dust clouds but only the LEL is of practical use; - this is because of the inherent difficulty of achieving homogeneous dust clouds at high temperatures (for dusts the LEL is often called the "Minimum Explosible Concentration", MEC). When processed with flammable liquids/vapors/mists,ignitable (hybrid) mixtures may be formed with combustible dusts. Ignitable mixtures will increase the rate of explosion pressure rise and the Minimum Ignition Energy (the minimum amount of energy required to ignite dust clouds - MIE) will be lower than the pure dust in air mixture. The Lower Explosive Limit (LEL) of the vapour/dust mixture will be lower than the individual LELs for the vapors/mists or dusts.

	A dust explosion may release of large quantities of gaseous products; this in turn creates a subsequent pressure rise of explosive force capable of damaging plant and buildings and injuring people. Usually the initial or primary explosion takes place in a confined space such as plant or machinery, and can be of sufficient force to damage or rupture the plant. If the shock wave from the primary explosion enters the surrounding area, it will disturb any settled dust layers, forming a second dust cloud, and often initiate a much larger secondary explosion. All large scale explosions have resulted from chain reactions of this type. Dry dust can be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport. Build-up of electrostatic charge may be prevented by bonding and grounding. Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting. All movable parts coming in contact with this material should have a speed of less than 1-meter/sec. A sudden release of statically charged materials from storage or process equipment, particularly at elevated temperatures and/ or pressure, may result in ignition especially in the absence of an apparent ignition source. One important effect of the particulate nature of powders is that the surface area and surface structure (and often moisture content) can vary widely from sample to sample, depending of how the powder was manufactured and handled; this means that it is virtually impossible to use flammability data published in the literature for dusts (in contrast to that published for gases and vapours). Autoignition temperatures are often quoted for dust clouds (minimum ignition temperature (MIT)) and dust layers (layer ignition temperature (LIT)); LIT generally falls as the thickness of the layer increases. Combustion products include: carbon monoxide (CO) carbon dioxide (CO2) other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

See section 8

Measures for Preventing Secondary Contamination

Refer to section above

6.2 Environmental precautions

See section 12

6.3 Methods and material for containment and cleaning up

Minor Spills	Clean up all spills
Major Spills	Clean up all spills

Personal Protective Equipment advice is contained in Section 8 of the SDS.

6.4 Reference to other sections

For information on safe operation, see section 7.

For information on personal protective equipment, see section 8.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions) Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame. Establish good housekeeping practices. Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds.

	Use continuous suction at points of dust generation to capture and minimise the accumulation of dusts. Particular attention should be given to overhead and hidden horizontal surfaces to minimise the probability of a "secondary" explosion. According to NFPA Standard 654, dust layers 1/32 in.(0.8 mm) thick can be sufficient to warrant immediate cleaning of the area. Do not use air hoses for cleaning. Minimise dry sweeping to avoid generation of dust clouds. Vacuum dust-accumulating surfaces and remove to a chemical disposal area. Vacuums with explosion-proof motors should be used. Control sources of static electricity. Dusts or their packages may accumulate static charges, and static discharge can be a source of ignition. Solids handling systems must be designed in accordance with applicable standards (e.g. NFPA including 654 and 77) and other national guidance. Do not empty directly into flammable solvents or in the presence of flammable vapors. The operator, the packaging container and all equipment must be grounded with electrical bonding and grounding systems. Plastic bags and plastics cannot be grounded, and antistatic bags do not completely protect against development of static charges. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source. Do NOT cut, drill, grind or weld such containers. In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.
Other information	Store in original containers. Keep containers securely sealed. Store in a cool, dry area protected from environmental extremes. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. For major quantities: Consider storage in bunded areas - ensure storage areas are isolated from sources of community water (including stormwater, ground water, lakes and streams}. Ensure that accidental discharge to air or water is the subject of a contingency disaster management plan; this may require consultation with local authorities.

7.2 Conditions for safe storage, including any incompatibilities

Suitable container	Glass container is suitable for laboratory quantities Polyethylene or polypropylene container. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Dilute solutions of all sugars are subject to fermentation, either by yeast or by other microorganisms or enzymes derived from these, producing gases which can pressurise and

	burst sealed containers. Some microorganisms will produce hydrogen or methane, adding a fire and explosion hazard. Cellulose and its derivatives may react vigorously with calcium oxide, bleaching powder, perchlorates, perchloric acid, sodium chlorate, fluorine, nitric acid, sodium nitrate and sodium nitrite. May be incompatible with aminacrine hydrochloride, chlorocresol, mercuric chloride, phenol, resorcinol, tannic acid and silver nitrate. Avoid reaction with oxidising agents

7.3 Specific end use(s)

Not Available

SECTION 8 Exposure controls / personal protection

8.1 Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
China Occupational Exposure Limits for Hazardous Agents in the Workplace - Dust	Regenerated cellulose	Not Available	Not Available	Not Available	Not Available	Not Available
China Occupational Exposure Limits for Hazardous Agents in the Workplace - Dust	methyl methacrylate/ butyl acrylate copolymer	Particles not otherwise regulated	8 mg/m3	Not Available	Not Available	(Name (a - refers to dust with free SiO2 less than 10 %, free of asbestos and toxic substances, and no occupational exposure limit has been established.))
China Occupational Exposure Limits for Hazardous Agents in the Workplace - Dust	titanium dioxide	Titanium dioxide dust	8 mg/m3	Not Available	Not Available	G2B

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
China Occupational Exposure Limits for Hazardous Agents in the Workplace - Dust	titanium dioxide (anatase)	Titanium dioxide dust	8 mg/m3	Not Available	Not Available	G2B
China Occupational Exposure Limits for Hazardous Agents in the Workplace - Dust	titanium dioxide (rutile)	Titanium dioxide dust	8 mg/m3	Not Available	Not Available	G2B
China Occupational Exposure Limits for Hazardous Agents in the Workplace - Dust	titanium dioxide (brookite)	Titanium dioxide dust	8 mg/m3	Not Available	Not Available	G2B

Emergency Limits

Ingredient	**TEEL-1**	**TEEL-2**	**TEEL-3**
Regenerated cellulose	Not Available	Not Available	Not Available
METHYL METHACRYLATE/ BUTYL ACRYLATE COPOLYMER	Not Available	Not Available	Not Available
titanium dioxide	30 mg/m^3	330 mg/m^3	2,000 mg/m^3
titanium dioxide (anatase)	30 mg/m^3	330 mg/m^3	2,000 mg/m^3
titanium dioxide (rutile)	30 mg/m^3	330 mg/m^3	2,000 mg/m^3
titanium dioxide (brookite)	30 mg/m^3	330 mg/m^3	2,000 mg/m^3

Ingredient	**Original IDLH**	**Revised IDLH**
Regenerated cellulose	Not Available	Not Available
methyl methacrylate/ butyl acrylate copolymer	Not Available	Not Available
titanium dioxide	5,000 mg/m^3	Not Available

Ingredient	Original IDLH	Revised IDLH
water	Not Available	Not Available
titanium dioxide (anatase)	5,000 mg/m^3	Not Available
titanium dioxide (rutile)	5,000 mg/m^3	Not Available
titanium dioxide (brookite)	5,000 mg/m^3	Not Available

8.2 Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction. Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace. If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered. Such protection might consist of: (a): particle dust respirators, if necessary, combined with an absorption cartridge; (b): filter respirators with absorption cartridge or canister of the right type; (c): fresh-air hoods or masks Build-up of electrostatic charge on the dust particle, may be prevented by bonding and grounding. Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to efficiently remove the contaminant.

Type of Contaminant:	Air Speed:
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge	1-2.5 m/s (200-500 ft/min)

	(active generation into zone of rapid air motion) |
	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion). | 2.5-10 m/s (500-2000 ft/min)

Within each range the appropriate value depends on:

Lower end of the range	Upper end of the range
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
2: Contaminants of low toxicity or of nuisance value only	2: Contaminants of high toxicity
3: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 4-10 m/s (800-2000 ft/min) for extraction of crusher dusts generated 2 metres distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Personal protection	
Eye and face protection	Safety glasses with side shields. Chemical goggles.[AS/NZS 1337.1, EN166 or national equivalent] Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].
Skin protection	See Hand protection below

Hands/feet protection	The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended. Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: frequency and duration of contact, chemical resistance of glove material, glove thickness and dexterity Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use. Contaminated gloves should be replaced. As defined in ASTM F-739-96 in any application, gloves are rated as: Excellent when breakthrough time > 480 min Good when breakthrough time > 20 min Fair when breakthrough time < 20 min Poor when glove material degrades For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended. It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times. Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

	Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example: Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of. Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended. Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present. polychloroprene. nitrile rubber. butyl rubber. fluorocaoutchouc. polyvinyl chloride. Gloves should be examined for wear and/ or degradation constantly.
Body protection	See Other protection below
Other protection	Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit.

Respiratory protection

Particulate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:001, ANSI Z88 or national equivalent)

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	P1 Air-line*	- -	PAPR-P1 -
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

· Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.

· The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).

· Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.

· Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.

· Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

· Use approved positive flow mask if significant quantities of dust becomes airborne.

· Try to avoid creating dust conditions.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Color	White
Form	Flaky
Odour	Odorless
Melting Range (°C)	No data
Boiling Range (°C)	No data
Flash Point (°C)	No data
Decomposition Temp (°C)	No data
Autoignition Temp (°C)	250℃
Upper Explosive Limit (%)	No data
Lower Explosive Limit (%)	No data
Volatile Component (%vol)	No data
Molecular Weight	No data
Viscosity	No data
Solubility in water (g/L)	No data
pH (1% solution)	No data
pH (as supplied)	No data
Vapour Pressure (kPa)	No data

Specific Gravity (water=1)	No data
Relative Vapour Density (air=1)	No data
Evaporation Rate	No data

9.2 Other information

Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

11.1 Information on toxicological affects

Acute Toxicity	
LD/LC50 values relevant for classification	No data.
Primary irritant effect	
On the skin	No data.
On the eyes	No data.
Inhaled	No data.
Sensitization	No known sensitizing effects.
More information on toxicity	According to the calculation method of the general EU classification guidelines for preparations (printed in the latest edition), there are no classification restrictions for this product. There are no obvious acute toxicity data to confirm the literature search.

11.2 Information on other hazards

No data.

SECTION 12 Ecological information

12.1 Toxicity

Regenerated cellulose

Endpoint	Test Duration (hr)	Species	Value	Source
Not Available	Not Available	Not Available	Not Available	Not Available

methyl methacrylate/ butyl acrylate copolymer

Endpoint	Test Duration (hr)	Species	Value	Source
Not Available	Not Available	Not Available	Not Available	Not Available

titanium dioxide

Endpoint	Test Duration (hr)	Species	Value	Source
LC50	96h	Fish	1.85-3.06mg/l	4
BCF	1008h	Fish	<1.1-9.6	7
EC50	72h	Algae or other aquatic plants	3.75-7.58mg/l	4
EC50	48h	Crustacea	1.9mg/l	2
NOEC(ECx)	672h	Fish	>=0.004mg/L	2
EC50	96h	Algae or other aquatic plants	179.05mg/l	2

titanium dioxide (anatase)

Endpoint	Test Duration (hr)	Species	Value	Source
LC50	96h	Fish	1.85-3.06mg/l	4
BCF	1008h	Fish	<1.1-9.6	7
EC50	72h	Algae or other aquatic plants	3.75-7.58mg/l	4
EC50	48h	Crustacea	1.9mg/l	2
NOEC(ECx)	672h	Fish	>=0.004mg/L	2
EC50	96h	Algae or other aquatic plants	179.05mg/l	2

titanium dioxide (rutile)

Endpoint	Test Duration (hr)	Species	Value	Source
LC50	96h	Fish	>100mg/l	2
EC50	72h	Algae or other aquatic plants	13mg/l	2
EC50	48h	Crustacea	>100mg/l	2

	NOEC(ECx) | 48h | Crustacea | <=1mg/l | 2
titanium dioxide (brookite)	Endpoint | Test Duration (hr) | Species | Value | Source LC50 | 96h | Fish | 1.85-3.06mg/l | 4 BCF | 1008h | Fish | <1.1-9.6 | 7 EC50 | 72h | Algae or other aquatic plants | 3.75-7.58mg/l | 4 EC50 | 48h | Crustacea | 1.9mg/l | 2 NOEC(ECx) | 672h | Fish | >=0.004mg/L | 2 EC50 | 96h | Algae or other aquatic plants | 179.05mg/l | 2
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

12.2 Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Regenerated cellulose	No Data available for all ingredients	No Data available for all ingredients
methyl methacrylate/ butyl acrylate copolymer	No Data available for all ingredients	No Data available for all ingredients
titanium dioxide	HIGH	HIGH
water	LOW	LOW
titanium dioxide (anatase)	HIGH	HIGH
titanium dioxide (rutile)	HIGH	HIGH
titanium dioxide (brookite)	HIGH	HIGH

12.3 Bioaccumulative potential

Ingredient	Bioaccumulation
Regenerated cellulose	No Data available for all ingredients
methyl methacrylate/ butyl acrylate copolymer	No Data available for all ingredients
titanium dioxide	LOW (BCF = 10)

Ingredient	Bioaccumulation
titanium dioxide (anatase)	LOW (BCF = 10)
titanium dioxide (rutile)	LOW (BCF = 10)
titanium dioxide (brookite)	LOW (BCF = 10)

12.4 Mobility in soil

Ingredient	Mobility
Regenerated cellulose	No Data available for all ingredients
methyl methacrylate/ butyl acrylate copolymer	No Data available for all ingredients
titanium dioxide	LOW (Log KOC = 23.74)
titanium dioxide (anatase)	LOW (Log KOC = 23.74)
titanium dioxide (rutile)	LOW (Log KOC = 23.74)
titanium dioxide (brookite)	LOW (Log KOC = 23.74)

12.5 Results of PBT and vPvB assessment

No Data.

12.6 Endocrine disrupting properties

No Data.

12.7 Other adverse effects

No Data.

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Waste chemicals:	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: Reduction Reuse Recycling Disposal (if all else fails) This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making

	decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. In most instances the supplier of the material should be consulted. DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority.
Contaminated packing materials:	Refer to section above
Precautions for Transport:	Refer to section above

SECTION 14 Transport information

14.1 UN number or ID number

Not Applicable

14.2 UN proper shipping name

Not Applicable

14.3 Transport hazard class(es)

Not Applicable

14.4 Packing group

Not Applicable

14.5 Environmental hazards

Not Applicable

14.6 Special precautions for user

Not Applicable

14.7 Maritime transport in bulk according to IMO instruments

Not Applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product should follow the relevant regulations of EU Directive/Hazardous substances regulations.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The SDS should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

According to regulations, the product is likely to be classified as article and is out of scope of a SDS as set out in regulation. This report is for reference only.

Statement:

1. This report is considered invalid without approved signature and special seal;
2. This information of section 1, 3 and 9 was provided by the applicant who should be responsible for the authenticity which HCT hasn't verified;
3. The content shown in this report refer only to the sample applied;
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====== End of Report ======