

Safety Data Sheets (GHS-SDS)

Product Name: SJ3B Revision Date: Apr 26, 2021 Issue date: May 28, 2021 Version: 4.6.0.2 Compiled in accordance with the 8th revised edition (ST/SG/AC.10/30/Rev.8 2019) of the UN GHS system..

SECTION 1: Identification

1.1 GHS Product identifier

Chemical Name	POLYESTER RESIN			
1.2 Other means of identification				
Chemical trade name	SJ3B			
Molecular formula	Mixture, not applicable.			
Structural formula	Mixture, not applicable.			
Molecular weight	Mixture, not applicable.			
CAS number	Mixture, not applicable.			

1.3 Recommended use of chemical and restrictions on use

Recommended use of the product

Resin used in the production of powder coatings.

Restricted use of the product

Only for industrial, professional or research purposes, please consult the manufacturer for other information.

<u>1.4 Supplier's details</u>

Manufacturer	Anhui Shenjian New Materials Co.,Ltd.
Address	NO.8 Baoshun Road, Qiaobei Industrial Park, Wuhu Economic & Technological
	Development Area, Anhui Province, China
Post code	241008
Contact number	+86-553-5316333
Company Fax	+86-553-5316330
E-mail address of person responsible for this SDS	ASJ_SDS@ 126.com
Company Website	http: //www.shen-jian.com
1.5 Emergency phone num	<u>ber</u>

Emergency telephone +86-553-5316333

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

	Substance		Mixture	\blacksquare		
GHS hazard category						
Skin sensitization	Category 1					
Serious eye damage/eye	Category 1					
irritation						
Respiratory sensitization	Category 1					
Specific target organ toxic	ity-single exposure					
Respiratory tract irritation	Category 3					
<u>2.2 GHS label elements</u>						
Signal word	Danger.					
Hazard statements						
H317	May cause an allerg	ic skin reaction	1.			
H318	Causes serious eye d	lamage.				
H334	May cause allergy o	r asthma sympt	toms or breathing difficulties if inl	naled.		
H335	May cause respirato	ry irritation.				
Precautionary statements						
Prevention						
P261	Avoid breathing dus	t/fume/gas/mis	st/vapours/spray.			
P264	Wash face, hands and	Wash face, hands and any exposed skin thoroughly after handing.				
P270	Do not eat,drink or smoke when using this product.					
P271	Use only outdoors o	r in a well-vent	tilated area.			
P280	Wear protective glov	ves.				
P284	Wear respiratory pro	otection.				
Response						
P302+P352	IF ON SKIN:Wash	with plenty of v	water.			
P304+P340	IF INHALED:Remo	ove person to fr	resh air and keep comfortable for b	oreathing.		
P333+P317	If skin irritation or ra	ash occurs:Get	medical help.			
P342+P316	If experiencing resp	iratory symptor	ms:Get emergency medical help in	nmediately.		
P362+P364	Take off contaminat	ed clothing and	d wash it before reuse.			
P305+P351+P338	IF IN EYES:Rinse c	autiously with	water for several minutes.Remove	contact lenses, if		
	present and easy to a	do.Continue rin	nsing.			
Storage						
P403+P235	Store in a well-venti	lated place.Kee	ep cool.			
Disposal						
P501	Dispose of contents/	container in ac	cordance with local and national r	regulations.		
Pictograms	\wedge		\land			



2.3 Other hazards which do not result in classification

Handling and/or handling of this substance may generate dust that can cause mechanical irritation of the eyes, skin, nose and throat.

SECTION 3: Composition/information on ingredients

Substances/Mixtures

	Substances		Mixtures 🗹
Ingredient name	Identifiers	%	Classification Regulation (EC) No.1272/2008 [CLP]
Benzene-1,2,4- tricarboxylic acid 1,2-anhydride	CAS: 552-30-7 EC: 209-008-0 REACH #: 01-2119489422-34 Index : 607-097-00-4 RTECS #: DC2050000	<2.0	Skin Sens. 1, H317 Eye Dam. 1, H318 Resp. Sens. 1, H334 STOT SE 3, H335
Benzene-1,2,4- tricarboxylic acid	CAS: 528-44-9 EC: 208-432-3 RTECS #: DC1980000	<1.0	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing.	
	Get medical attention if symptoms.	
Skin contact	Flush contaminated skin with plenty of water.	
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes.	
	Get medical attention if symptoms.	
Ingestion	Wash out mouth with water. Get medical attention if symptoms.	
<u>4.2 Most important sympto</u>	oms/effects, acute and delayed	
Potential acute health effec	ts	
Inhalation	Exposure to airborne concentrations above statutory or recommended exposure limits	
	may cause irritation of the nose, throat and lungs.	
Skin contact	No known significant effects or critical hazards.	
Eye contact	Causes eye irritation.	
Ingestion	No known significant effects or critical hazards.	
Over-exposure signs/sympt	toms	
Inhalation	Adverse symptoms may include the following: respiratory tract irritation, coughing.	
Skin	No specific data.	
Eye	Adverse symptoms may include the following: pain or irritation, watering, redness.	

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Ingestion	No specific data.
4.3 Indication of immediate	e medical attention and special treatment needed, if necessary
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities
	have been ingested or inhaled.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.
Saa tariaalariaal informati	on (Section 11)

See toxicological information (Section 11)

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Suitable	Use foam, CO_2 or dry powder fire extinguishing agent.
Not suitable	Avoid using direct water to extinguish fires. Direct water may cause the splash of
	flammable liquids, and in severe cases, spread the fire.

5.2 Specific hazards arising from the chemical

Unusual fire/explosion hazards

No special danger.

Hazardous thermal decomposition products

In the event of a fire, harmful decomposition products may be produced, such as carbon monoxide, carbon dioxide, black smoke, aldehydes, and organic acids.

5.3 Special protective actions for fire-fighters

Firefighters should wear breathing masks ((conforming to MSHA/NIOSH requirements or equivalent)) and full protective clothing. Firefighters should put out the fire at a safe distance upwind.

Prevent firefighting water from polluting the surface and groundwater system..

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Irrelevant and unprotected personnel enter. Do not touch or walk past the spilled material. Cut off all ignition sources. No flames, smoking or flames are allowed in the hazardous area. Avoid breathing dust. Provide adequate ventilation. Wear suitable respirators when there is insufficient ventilation. Wear suitable personal protective equipment.

For emergency responders

If you need to wear special clothing to deal with spills, please refer to section 8 for information on suitable and inappropriate materials. See the information in the section "Non-emergency responders".

6.2 Environmental precautions

Avoid spreading and running away of spillage, and avoid spillage from contacting and entering the soil, rivers, sewers and sewage pipes.

May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

Small leak	Move the container away from the spill area.
	Use a vacuum cleaner to clean up or thoroughly clean up contaminants and place
	them in waste containers with designated labels.
Massive leaks	Move the container away from the spill area. Approach the spill from upwind.
	Prevent entry into sewers, waterways, basements or confined areas.
	Use a vacuum cleaner to clean up or thoroughly clean up contaminants and place
	them in waste containers with designated labels.
	Avoid raising dust and avoid spreading it by wind.

Note: For personal protective equipment, see section 8; for waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see section 8). No ingestion.
	Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid release to the
	environment.Prevent dust accumulation. Use only under adequate ventilation.
	Wear suitable respirators when there is insufficient ventilation.
	When transferring materials, the container and equipment should be grounded to release
	static electricity generated during material transportation.
Advice on general	Eating, drinking, and smoking should be prohibited in areas where this substance is
	handled, stored, and processed.Staff should wash their hands before eating, drinking and
	smoking.Before entering the eating area, remove contaminated clothing and protective
	equipment.
7.2 Conditions for safe sto	rage, including any incompatibilities
Conditions for safe storage	ge
	Do not store above the following temperature: 30°C (86°F (Fahrenheit)).

Remarks	Avoid raising dust.
	It is not recommended to use other containers or packaging materials to prevent pollution.
Packaging Materials	It is recommended to use the packaging materials allocated by the supplier.
	ventilated place.
	Avoid direct sunlight, keep away from heat and fire sources, and store in a cool, dry and
	It should be stored separately from oxidizing substances and avoid mixed storage.
	Store in accordance with local regulations.
	Do not store above the following temperature: 30°C (86°F (Fahrenheit)).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure Limits:

Ingredient name	Benzene-1,2,4-tricarboxylic acid 1,2-anhydride (CAS. 552-30-7)			
Country / Region	Occupational exposure limit (8h)		Occupational exposure limit (short time)	
	ppm	mg/m ³	ppm	mg/m ³

United States-NIOSH	0.005	0.04	—	—
South Korea		0.0005		0.002
Ireland	_	0.0005	—	0.002
Germany (AGS)		0.04		0.04
Denmark	—	0.04	—	0.04
Australia	0.005	0.039	—	—

Biological limits:

No data. Monitoring method EN 1404

EN 14042 Workplace Air A guide to procedures used to assess exposure to chemical or biological agents.

8.2 Appropriate engineering controls

Use only under adequate ventilation.

If dust, smoke, gas, vapor or mist are generated during use, please use process isolation equipment, local ventilation systems or other engineering controls to ensure that the content of airborne pollutants in the working environment of workers is below the recommended or legal limit. The process control method used should also control the concentration of gas, steam or dust below the exposure limit value.

8.3 Individual protection measures, such as personal protective equipment(PPE)

Eye/face protection	Wear safety glasses with side shields.
Skin protection	It is recommended to wear dust-proof clothing.
Respiratory protection	If the result of the risk assessment shows that it is necessary, please use a suitable
	breathing apparatus with a particulate filter that meets the standard. The choice of
	respirator must be based on known or expected exposure levels, product hazards, and
	safe working limits of the selected respirator.
Hand protection	If the result of the risk assessment shows that it is necessary, please always wear
	chemical-resistant and impermeable gloves that meet the standards when you come into
	contact with chemical products.
Hygiene measures	After exposure to chemicals, wash hands, forearms and face thoroughly before meals,
	before smoking, before going to the toilet, and after work.Use appropriate techniques to
	remove clothing that may have been contaminated. Contaminated clothing needs to be
	washed before reuse. Ensure that the eyewash station and safety shower room are close
	to the workplace.
Remarks	All chemical protective gloves are suitable for use to avoid contact with skin.
	The choice of gloves should be aimed at the physical protection of hands.

SECTION 9: Physical and chemical properties and safe characteristics

Physical State	Solid flake particles.
Colour	Pale white or light yellow.
Odour	Odourless.
Odor threshold	No data.

Melting point/freezing point Boiling point, initial	No data.
boiling	
• • • • •	Not flammable, but will burn if exposed to flame or high temperature for a long time.
Lower and upper explosion	No data.
Flash point	>350 (°C) (closed cup)
Auto-ignition temperature	>350(°C)
Decomposition temperature	e>350(°C)
РН	Not applicable.
Kinematic viscosity	Not applicable.
Solubility (mg/L)	Partially soluble in the following materials: diethyl ether and acetone.
	Insoluble in the following materials: cold water, hot water, methanol and n-octanol.
Solubility in water (mg/L)	No data.
Partition coefficient n-octanol/water(log value)	No data.
Vapour pressure(kPa)	No data.
Evaporation rate	No data.
Relative density (water = 1)	1.2
Density (g/cm ³)	1.2 (23°C)
Bulk density	600 to 750 kg/m3
Relative vapor density (air=1)	No data.
Particle characteristics	No data.

SECTION 10: Stability and reactivity

<u>10.1 Reactivity</u>	
	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	
	This product is stable.
	It is stable under recommended storage and handling conditions (see section 7).
<u>10.3 Possibility of hazardou</u>	is reactions
	Under normal storage and use, hazardous chemical reactions will not occur.
10.4 Conditions to avoid	
	Avoid generating dust and all sources of ignition (spark or flame) during handling.
	Take precautions to prevent electrostatic discharge. To prevent fire or explosion, the
	container and equipment should be grounded when transferring materials to release static
	electricity generated during material transportation. Prevent dust accumulation.
10.5 Incompatible materials	<u>Σ</u>
	Reactive or incompatible with the following materials: oxidizing materials.
<u>10.6 Hazardous decomposit</u>	tion products
	Under normal storage and use conditions, hazardous decomposition products will not be

produced.

SECTION 11: Toxicological information

11.1 Toxicological effects

Result	Spe	ecies		Dose		Exposure
LC ₅₀ Inhalation	Rat - Ma	le, Female	>2.33 n	ng/l		4 hours
Dusts and mists						
LD ₅₀ Dermal	Rabbit		>2000 mg/kg			—
LD ₅₀ Oral	Rat - Fen	nale	>2030 1	mg/kg		—
LD ₅₀ Oral	Rat - Ma	le	>3340	mg/kg		—
LD ₅₀ Oral	Rat - Ma	le, Female	>2730	mg/kg		—
LC ₅₀ Inhalation	Rat		>3750	mg/m ³		4 hours
Dusts and mists						
LD ₅₀ Dermal	Rabbit		$> 2000 \mathrm{m}$	mg/kg		—
LD ₅₀ Oral	Rat - Ma	le, Female	>2730	mg/kg		
-		-				
Result		Species	Score	Exposure		Observation
Skin - Oedema		Rabbit	0.39	4 hours 0	.5 g	24 to 72 hours
Skin - Erythema/Es	char	Rabbit	1	4 hours 0	.5 g	24 to 72 hours
Skin - Mild irritant		Rabbit		4 hours 0	.5 g	—
tion		-				
Result		Species	Score	Exposure		Observation
Eyes - Cornea opac	ity	Rabbit	4	0.1g		24 hours
		Rabbit	2	0.1g		24 hours
•	he	Rabbit	3	0.1g		24 hours
5	ha			U		
•	lie	Rabbit	4	0.1g		24 hours
Eyes - Irritant		Rabbit				<u> </u>
tization						
Route of expo	osure		Species			Result
Respiratory		Man			Sensitisir	ıg
skin		Guinea pi	ig		Sensitisir	•
		-				
Respiratory		Rat	N		Not sensi	tizing
skin		Mammal -		Not sensi	tizing	
				1		
	LC ₅₀ Inhalation Dusts and mists LD ₅₀ Dermal LD ₅₀ Oral LD ₅₀ Oral LD ₅₀ Oral LC ₅₀ Inhalation Dusts and mists LD ₅₀ Dermal LD ₅₀ Oral Result Skin - Oedema Skin - Erythema/Es Skin - Mild irritant Skin - Mild irritant Eyes - Cornea opac Eyes - Iris lesion Eyes - Iris lesion Eyes - Redness of t conjunctivae Eyes - Irritant Eyes - Oedema of t conjunctivae Eyes - Irritant	LC $_{50}$ Inhalation Dusts and mistsRat - Mat NatLD $_{50}$ DermalRabbitLD $_{50}$ OralRat - FenLD $_{50}$ OralRat - MatLD $_{50}$ OralRat - MatLD $_{50}$ OralRat - MatDusts and mistsImage: Constraint of the second sec	LC_{50} Inhalation Dusts and mistsRat - Male, FemaleLD_{50} DermalRabbitLD_{50} OralRat - FemaleLD_{50} OralRat - MaleLD_{50} OralRat - Male, FemaleLC_{50} InhalationRatDusts and mistsImage: Comparison of the temperatureLD_{50} OralRat - Male, FemaleLC_{50} InhalationRatDusts and mistsImage: Comparison of temperatureLD_{50} OralRat - Male, FemaleLD_{50} OralRat - Male, FemaleSoporalRat - Male, FemaleSign - OedemaRabbitSkin - OedemaRabbitSkin - Mild irritantRabbitSkin - Mild irritantRabbitSkin - Mild irritantRabbitEyes - Cornea opacityRabbitEyes - Iris lesionRabbitEyes - Nedness of the conjunctivaeRabbitEyes - Oedema of the conjunctivaeRabbitEyes - IrritantRabbitRabbitRabbitRabbitRabbitRespiratoryMan skinSkinGuinea piRespiratoryRat skinSkinManmal	LC_{50} Inhalation Rat - Male, Female >2.33 r Dusts and mists Rabbit >2000 LD_{50} Oral Rat - Female >2030 LD_{50} Oral Rat - Male, Female >3340 LD_{50} Oral Rat - Male, Female >3750 LD_{50} Oral Rat - Male, Female >2000 LD_{50} Oral Rat - Male, Female >2730 LC_{50} Inhalation Rat >3750 Dusts and mists >2000 LD_{50} Oral Rat - Male, Female >2730 Dusts and mists >2000 LD_{50} Oral Rat - Male, Female >2730 Result Species Score Skin - Oedema Rabbit 0.39 Skin - Erythema/Eschar Rabbit 1 Skin - Mild irritant Rabbit 4 Eyes - Cornea opacity Rabbit 2 Eyes - Cornea opacity Rabbit 3 Eyes - Redness of the Rabbit 3 conjunctivae Rabbit 4 Eyes - Irritant Rab	LC $_{50}$ Inhalation Dusts and mistsRat - Male, Female>2.33 mg/lLD $_{50}$ Dermal LD $_{50}$ Oral LD $_{50}$ Oral CalRat - Female>2000 mg/kgLD $_{50}$ Oral CalRat - Male>3340 mg/kgLD $_{50}$ Oral CalRat - Male, Female>2730 mg/kgLC $_{50}$ Inhalation Dusts and mistsRat>3750 mg/m3Dusts and mistsNormal Rat>2000 mg/kgLD $_{50}$ Oral DermalRat - Male, Female>2730 mg/kgLD $_{50}$ Oral DermalRat - Male, Female>2730 mg/kgLD $_{50}$ OralRat - Male, Female>2000 mg/kgLD $_{50}$ OralRat - Male, Female>2730 mg/kgLD $_{50}$ OralRat - Male, Female>2730 mg/kgLD $_{50}$ OralRat - Male, Female>2730 mg/kgLD $_{50}$ OralRat - Male, Female>2000 mg/kgLD $_{50}$ OralRat - Male, Female>2730 mg/kgLD $_{50}$ OralRat - Male, Female>2730 mg/kgLD $_{50}$ OralRat - Male, Female>2000 mg/kgSkin - OedemaRabbit0.394 hours 0Skin - Mild irritantRabbit40.1gEyes - Iris lesionRabbit30.1gEyes - Sedema of the conjunctivaeRabbit30.1gEyes - IrritantRabbitRespiratory <td>LC50 Inhalation Rat - Male, Female >2.33 mg/l Dusts and mists Not semicless of the conjunctivae >2000 mg/kg LD50 Conjunctivae Rat - Female >2000 mg/kg LD50 Oral Rat - Male, Female >2030 mg/kg LD50 Oral Rat - Male, Female >2730 mg/kg LC50 Inhalation Rat >3750 mg/m³ Dusts and mists Not semicless >3750 mg/m³ LD50 Oral Rat - Male, Female >2000 mg/kg LD50 Dermal Rabbit >2000 mg/kg LD50 Oral Rat - Male, Female >2730 mg/kg Skin - Oedema Rabbit 0.39 4 hours 0.5 g Skin - Mild irritant Rabbit - 4 hours 0.5 g Skin - Mild irritant Rabbit 2 0.1g Eyes - Iris lesion Rabbit 2 0.1g Eyes -</td>	LC50 Inhalation Rat - Male, Female >2.33 mg/l Dusts and mists Not semicless of the conjunctivae >2000 mg/kg LD50 Conjunctivae Rat - Female >2000 mg/kg LD50 Oral Rat - Male, Female >2030 mg/kg LD50 Oral Rat - Male, Female >2730 mg/kg LC50 Inhalation Rat >3750 mg/m³ Dusts and mists Not semicless >3750 mg/m³ LD50 Oral Rat - Male, Female >2000 mg/kg LD50 Dermal Rabbit >2000 mg/kg LD50 Oral Rat - Male, Female >2730 mg/kg Skin - Oedema Rabbit 0.39 4 hours 0.5 g Skin - Mild irritant Rabbit - 4 hours 0.5 g Skin - Mild irritant Rabbit 2 0.1g Eyes - Iris lesion Rabbit 2 0.1g Eyes -

Germ cell mutagenicity

Ingredient name	Test	Experiment	Result
	OECD 471 Bacterial	Experiment: In vitro	Negative
	Reverse Mutation	Subject: Bacteria	

		Metabolic activation:	
		Without & with	
	OECD 473 In vitro	Experiment: In vitro	Negative
	Mammalian Chromosomal	Subject: Mammalian-Animal	
Benzene-1,2,4-tricarboxylic acid 1,2-anhydride	Aberration Test	Cell: Germ	
CAS 552-30-7		Metabolic activation:	
0110 332 30 7		Without & with	
	OECD 476 In vitro	Experiment: In vitro	Negative
	Mammalian Cell Gene	Subject: Mammalian-Animal	
	Mutation Test	Cell: Germ	
		Metabolic activation:	
		Without & with	
	OECD 471 Bacterial	Experiment: In vitro	Negative
	Reverse Mutation	Subject: Bacteria	
		Metabolic activation:	
		Without & with	
Benzene-1,2,4-tricarboxylic	OECD 476 In vitro	Experiment: In vitro	Negative
acid CAS 528-44-9	Mammalian Cell Gene	Subject: Mammalian-Animal	
CAS 520-44-7	Mutation Test	Cell: Germ	
	OECD 473 In vitro	Experiment: In vitro	Negative
	Mammalian Chromosomal	Subject: Mammalian-Animal	
	Aberration Test	Cell: Germ	

Carcinogenicity

Reproductive toxicity

No data.

Ingredient name	Maternal toxicity	Fertility	Develop mental toxin	Species	Dose	Exposure
Benzene-1,2,4-tricarboxylic	_	Negative		Rat	Inhalation: 500 μg/m ³ (NOAEC)	6 hours per day
acid 1,2-anhydride CAS 552-30-7	_	Negative	_	Guinea pig	Inhalation: 500 μg/m ³ (NOAEC)	6 hours per day
Benzene-1,2,4-tricarboxylic acid CAS 528-44-9			Negative	Rat - Female	Inhalation: 0.5 μg/m ³ (NOEL)	6 hours per day

STOT-single exposure

Ingredient name	Category	Route of exposure	Target organs
Benzene-1,2,4-tricarboxylic acid 1,2-anhydride CAS 552-30-7	Category 3	_	Respiratory tract irritation
Benzene-1,2,4-tricarboxylic acid CAS 528-44-9	Category 3	_	Respiratory tract irritation

STOT-repeated exposure No data.

Aspiration hazard No data.

11.2 Information on likely routes of exposure

	No data.
Potential acute health	effects
Eye contact	Causes eye irritation.
Inhalation	Exposure to airborne concentrations above statutory or recommended exposure limits
	may cause irritation of the nose, throat and lungs.
Skin contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
<u>11.3 Symptoms related</u>	to the physical, chemical and toxicological characteristics

Eye contact	Adverse symptoms may include the following: pain or irritation, watering, redness.
Inhalation	Adverse symptoms may include the following: respiratory tract irritation, coughing.
Skin contact	No specific data.
Ingestion	No specific data.

<u>11.4 Delayed and immediate effects and also chronic effects from short and long term exposure</u>

Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects

Ingredient name	Result	Species	Dose	Exposure			
	Sub-chronic	Rat - Male,Female	10000 mg/kg/day	—			
Benzene-1,2,4-tricarboxylic	NOAEL Oral		(Highest tested dose)				
acid 1,2-anhydride	Sub-acute LOAEC	Rat - Male,Female	0.2 mg/m^3	6 hours /day;			
CAS 552-30-7	Inhalation Dusts			5 days per week			
	and mists						
	Sub-acute	Rat - Male,Female	300 mg/kg/day	4 weeks;			
Benzene-1,2,4-tricarboxylic	NOEL Oral			5 days per week			
acid	Sub-acute LOAEC	Rat - Male,Female	$300 \ \mu g/m^3$	6 hours /day;			
CAS 528-44-9	Inhalation Dusts		(Highest tested dose)	5 days per week			
	and mists						
General	Repeated or prolong	ged inhalation of dus	st may lead to chronic respirate	ory irritation.			
Carcinogenicity	No known significant effects or critical hazards.						
Mutagenicity	No known significat	No known significant effects or critical hazards.					

Reproductive toxicity No known significant effects or critical hazards.

<u>11.5 Numerical measures of toxicity (such as acute toxicity estimates)</u>

Acute toxicity estimate

In ano diant name	Oral	Dermal	Inhalation (gases)	Inhalatio(vapours)	Inhalation(dusts
Ingredient name	mg/kg	mg/kg	(ppm)	(mg/l)	and mists) (mg/l)
Benzene-1,2,4-tricarboxylic acid 1,2-anhydride CAS 552-30-7	2030	N/A	N/A	N/A	N/A

Benzene-1,2,4-tricarboxylic acid CAS 528-44-9	2730	N/A	N/A	N/A	N/A
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SECTION 12: Ecological information

12.1 Toxicity

Ingredient name	Res	sult	Species	Exposure
Benzene-1,2,4-tricarboxylic	Acute $EC_{50} > 739 \text{ mg/l}$	Fresh water	Algae	96 hours
acid 1,2-anhydride	Acute EC ₅₀ >792 mg/l	Fresh water	Daphnia	48 hours
CAS 552-30-7	Acute LC ₅₀ >957 mg/l	Fresh water	Fish	96 hours
Benzene-1,2,4-tricarboxylic	Acute $EC_0 > 792 \text{ mg/l}$	Fresh water	Daphnia	48 hours
acid	Acute $LC_0 > 1000 \text{ mg/l}$	Fresh water	Fish	96 hours
CAS 528-44-9	Acute NOEC>739 mg/l	Fresh water	Algae	96 hours

12.2 Persistence and degradability

Ingredient name	Test	Result	Dose	Inoculum
Benzene-1,2,4-tricarboxylic	OECD 301B	77.4%-28 days		—
acid 1,2-anhydride	Ready Biodergradability-CO ₂			
CAS 552-30-7	Evolution Test			
Benzene-1,2,4-tricarboxylic	OECD 301B	>60%-7 days		
acid	Ready Biodergradability-CO ₂			
CAS 528-44-9	Evolution Test			

Ingredient name	Aquatic half-life	Photolysis	Biodegradability
Benzene-1,2,4-tricarboxylic acid 1,2-anhydride CAS 552-30-7			Readily
Benzene-1,2,4-tricarboxylic acid CAS 528-44-9			Readily

12.3 Bioaccumulative potential

Ingredient name	LogP _{ow}	BCF	Potential
Benzene-1,2,4-tricarboxylic acid 1,2-anhydride CAS 552-30-7	0.06		low
Benzene-1,2,4-tricarboxylic acid CAS 528-44-9	0.95	3.2	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc) No data. <u>12.5 Results of PBT and vPvB assessment</u> PBT Not applicable

F D I	Not applicable.
vPvB	Not applicable.

12.6 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Disposal methods

Waste chemicals	The generation of waste should be avoided or reduced as much as possible. The disposal
	of products, solutions and by-products shall comply with environmental protection.
	Dispose of surplus and non-renewable products through a licensed waste disposal
	contractor. Waste should not be discharged into the sewer without disposal, unless it
	fully complies with the requirements of the competent authority in all jurisdictions.
	Requirements of waste disposal regulations and relevant local regulations.
Contaminated packaging	Should be recycled. Only when recycling is not feasible, should incineration or landfill be
	considered. Use safe methods to dispose of this product and its container.
	Empty containers or linings may retain some product residues.
	Avoid spreading and running away of spillage, and avoid spillage from contacting and
	entering the soil, rivers, sewers and sewage pipes.
13.2 Disposal consideration	<u>s</u>

Please refer to the "Disposal methods" section.

13.3 Other information

As far as the supplier currently knows, this product is not considered hazardous waste.

SECTION 14: Transport information						
	UN	IMDG	IATA			
<u>UN number</u>	Not regulated.	Not regulated.	Not regulated.			
<u>UN proper shipping name</u>	—	—	—			
<u>Transport hazard class(es)</u>	—	—				
Packing group,if applicable	—	—	_			
<u>Environmental hazards</u>	No	No	No			
Additional information						

Special precautions for user Transport within user's premises: always transport in closed containers that are upright

and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments

Not available.

SECTION 15: Regulatory information

15.1 Inventory information

				All su	bstances	of this ma	terial				
AICS	IECSC	ENCS	NZloc	PICCS	TCSI	NCI	KECL	EINECS	TSCA	DSL	
List	List	List	List	List	List	List	List	List	List	List	

(AICS)	Australian Inventory of Chemical Substances.
[IECSC]	The Inventory of Existing Chemical Substance in China.
(ENCS)	Japan Inventory of Existing and Notified Substances.
[NZloc]	New Zealand Inventory.
(PICCS)	Philippine Inventory of Chemicals and Chemical Substances.
【TCSI】	Taiwan Chemical Substance Inventory of china.
(NCI)	Vietnam National Chemical Inventory.
[KECL]	Korean Existing Chemicals List.
[EINECS]	European Inventory of Existing commercial Chemical Substances.
[TSCA]	Toxic Substances Control Act Inventory in U.S.A.
[DSL]	Domestic Substances List in Canada.

15.2 International regulations

All substances of this material						
А	В	С	D	Е		
Not listed.	Not listed.	Not listed.	Not listed.	Not listed.		

[A] Chemical Weapon Convention List Schedules I, II & III Chemicals

(B) Montreal Protocol (Annexes A, B, C, E)

[C] Stockholm Convention on Persistent Organic Pollutants

(D) Rotterdam Convention on Prior Inform Consent (PIC)

(E) UNECE Aarhus Protocol on POPs and Heavy Metals

SECTION 16: Other information

16.1 Revision information

Reasons for Issue	Sections 1, 2, 3, 8, 9, and 15 have been revised.
Issue date	05/28/2021.
Last issue date	02/18/2019.
Version	4.6.0.2.

16.2 Reference

- [1] IPCS: The International Chemical Safety Cards (ICSC), website: <u>http://www.ilo.org/dyn/icsc/showcard.home</u>.
- [2] IARC, website: <u>http://www.iarc.fr/.</u>
- (3) OECD: The Global Portal to Information on Chemical Substances,
- website: <u>http://www.echemportal.org/echemportal/index?page.</u>
- [4] CAMEO Chemicals, website: <u>http://cameochemicals.noaa.gov/search/simple.</u>
- [5] NLM:ChemIDplus, website: <u>http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp.</u>
- [6] EPA: Integrated Risk Information System, website: <u>http://cfpub.epa.gov/iris/.</u>
- [7] U.S. Department of Transportation:ERG, website: <u>http://www.phmsa.dot.gov/hazmat/library/erg.</u>
- [8] Germany GESTIS-database on hazard substance, website: <u>http://gestis-en.itrust.de/.</u>

16.3 Abbreviations and acronyms

Version:4.6.0.2

CAS-Chemical Abstracts Service	UN-The United Nations
PC-STEL- Short term exposure limit	PC-TWA - Time Weighted Average
DNEL - Derived No Effect Leve	IARC - International Agency for Research on Cancer
RPE - Respiratory Protective Equipment	PNEC -Predicted No Effect Concentration
LC ₅₀ - Lethal Concentration 50%	LD ₅₀ - Lethal Dose 50%
NOEC -No Observed Effect Concentration	EC ₅₀ - Effective Concentration 50%
PBT - Persistent, Bioaccumulative, Toxic	POW - Partition coefficient Octanol:Water
BCF - Bioconcentration factor (BCF)	vPvB - very Persistent, very Bioaccumulative
CMR - Carcinogens, mutagens or substances toxic to reproduction	IMDG-International Maritime Dangerous Goods
ICAO/IATA-International Civil Aviation Organization/International Air Transportation Association	NFPA-National Fire Protection Association
ACGIH-American Conference of Governmental Industrial Hygienists	OECD-Organization for Economic Co-operation and Development

Disclaimer

This Safety Data Sheet (SDS) was prepared according to the 8th revised edition of the United Nations GHS system (ST/SG/AC.10/30/Rev.8 2019). The data comes from international authoritative databases and data submitted by companies. Other information is based on the company's current the knowledge that you have mastered. We try our best to ensure the accuracy of all the information in it, but due to the diversity of information sources and the limitations of the company's knowledge, this document is only for users' reference. The user of the safety data sheet should make a judgment on the rationality of the relevant information according to the purpose of use. We are not responsible for any damages caused by the operation, storage, use or disposal of this product.