

# Guangdong Sanvo Chemical Industry Technology Limited Material Safety Data Sheet

#### 1. Identification of Chemicals and Manufacturer

English name of chemical: Heat-resistant Aerosol Paint

Manufacturer: Guangdong Sanvo Chemical Industry Technology Limited

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Recommended use: It is suitable to all kinds of metal, surface treated wood, glass, ABS plastic and other substrates on

the spray painting construction, especially good for high temperature condition.

#### 2. Hazards Identification

#### Emergency overview: flammable aerosol.

**Physical and chemical hazard:** it can cause combustion and explosion in case of open fire, high heat, etc. If the flow rate is too fast, it is easy to generate and accumulate static electricity. It reacts violently with oxidant, strong acid and strong base.

**Health hazards:** through inhalation, skin contact, eye contact and ingestion, it invades the human body and produces stimulation and anesthesia, which is harmful to human health.

**Environmental hazards:** volatile components can pollute the air, residues can pollute the soil, and then permeate the polluted water.

GHS hazard category: according to the series standards of chemical classification, warning labels and warning instructions, the product belongs to flammable gas, category: 2.1, flammable gas.

#### Label elements: warning words - danger.

Hazard information: flammable gas, irritant.

Pictogram:

**Precautions:** keep away from heat source, fire source and high temperature. When using, eliminate static electricity, avoid inhalation of volatile gas and skin contact, wear anti-virus mask and wash with soapy water after use.

**Preventive measures:** keep away from heat source, spark, open fire and hot surface, and use non sparking tools for operation. Keep container closed. Take measures to prevent static electricity. Use explosion-proof electrical appliances. Wear protective gloves, glasses and mask. Clean the contact area thoroughly.Do not eat, drink or smoke in the workplace.

Accident response: the leakage source should be cut off first, and the personnel in the leakage pollution area should be quickly evacuated to the safety area, and the isolation should be carried out strictly. Restrict access and eliminate all sources of ignition.

Safe storage: store in a cool and dry place with good ventilation, away from fire and direct sunlight.



#### Waste disposal: see part 13

**Main symptoms:** steam irritates eyes, skin and mucous membrane, and has anesthetic effect on central nervous system.Long term exposure to high concentration steam will cause excessive fatigue, dyspnea, nausea, headache, tachycardia and other phenomena. At the same time, it has degreasing effect on skin, causing dryness, desquamation and chaps.

**Emergency summary:** move to place full of fresh air, wash or shower with water, and ask for medical treatment.

#### 3. Component/ Composition Information Substance/mixture Mixture **Chemical Entity Proportion (%)** CAS No. Acrylic resin 3-15% 9003-01-4 Silicone resin 8-20% 67763-03-5 Pigment 1-12% N/A Acetone 3-12% 67-64-1 Ethyl Acetate 3-15% 141-78-6 Toluene 3-20% 108-88-3 Dimethylbenzene 2-15% 1330-20-7 DME 35~58% 115-10-6

#### 4. First aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.



## 5. Fire-fighting measures

Extinguishing media	Foam. Powder. Carbon dioxide (CO2).
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards	Contents under pressure. Pressurized container may rupture when exposed to heat or flame. During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.
Extinguishing method	First cut off the fuel source and evacuate the personnel. Spray water can keep the container cool, use extinguishing agent from the wind direction downward.
Special protective equipment for fire personnel	Wear a positive pressure self-contained breathing apparatus and a protective suit to protect the whole face.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedure

For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
Clean-up methods and materials and containment measures	Stop leak if you can do so without risk. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.



7. Handling and storage	
Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
Storage	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

#### 8. Exposure Controls / Personal Protection

Maximum permissible concentration in China:

#### MAC (mg/m3): 100 [Toluene]; 400 [Acetone]; 300 [Acetic Ether]; 100[Dimethylbenzene]

#### Engineering measures:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower should be available when handling this product.

#### **Respiratory protection:**

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSHapproved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

#### Hand protection:

Wear protective gloves such as: Nitrile. Polyvinyl chloride (PVC). Viton/butyl.

#### Eye protection:

Wear safety glasses with side shields (or goggles).

#### Skin and body protection:

Wear appropriate chemical resistant clothing.



#### 9. Physical and chemical properties

Appearance	
Physical state	Colorful Liquid
Form	Aerosol.
Colour	Colorful
Odour:	Solvent
pH value:	Not available.
Melting point/freezing point (°C)	-45-95.35
Boiling point (°C)	Not available.
Initial boiling point ( $^{ m C}$ )	56
Boiling range (℃)	56.1-156.6
Flash point (℃)	-41
Lower Explosive limit [%(V/V)]	2.5[ Acetone ]: 2.18[Acetic ether]:1.27[Toluene]
Upper Explosive limit [%(V/V)]	12.8[ Acetone ]: 11.4[Acetic ether]:7.0[Toluene]
Vapor Pressure (kpa)	Not available.
Relative Vapor density (air = 1)	0.89~0.96
Solubility	Not soluble in water, soluble in esters, aromatic, chloroform and other organic solvents.
N - octanol/water distribution coefficient	Not available.
Auto-ignition temperature	Not available.
10. Stability and reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.

Rodolinity	The product is stable and non reactive and infinite conditions of doe, storage and ranoport.
Stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Acids. Strong oxidizing agents. Alkalies.
Hazardous decomposition products	CO, CO <sub>2</sub> .

#### 11. Toxicological information

No toxicological information is available. The following are the main hazardous components of this product, for reference only.

#### Toxicological data of main harmful component- Acetone:

Acute toxicity: LD50: 5800mg/kg (Rat mouse oral), 20000mg/kg(Rabbit skin contact); LC50: no information.

Subacute and chronic toxicity: rats inhaled 7.22g/m3/day for 600days(8 hours per day, 30days per month), no pathological changes.

 $\label{eq:relation} \textit{Irritation:} \ \textit{rabbit eye: 3950} \ \mu \ \textit{g. Severe irritation.} \ \textit{Rabbit skin open stimulation test: 395mg, mild stimulation.}$ 

Mutagenicity: cytogenetic analysis: Saccharomyces cerevisiae 200mmol / tube.Sex chromosome deletion and non segregation: mice inhaled 12 mg / L.

#### Toxicity data of ethyl acetate, the main harmful component:

Acute toxicity: LD: 5620mg / kg (oral administration in rats) and 4940mg / kg (oral administration in rabbits);LC: 5760mg / kg, 8 hours (rats inhaled);Human inhalation  $2000ppm \times 60$  minutes, severe toxic reaction;When people inhale 800ppm, they have symptoms;Inhalation of 400ppm can cause irritation to eyes, nose and throat for a short time.5050

Subacute and chronic toxicity: guinea pigs inhaled 7200mg / m3, no significant effect.Rabbits inhaled 16000mg / m3×1 hour / day, 40 days, anemia, leukocytosis, visceral edema and steatosis.



#### 12. Ecological information

Environmental destruction and distribution: possible pollution of air and water. Low toxicity to fish and mammals.

Persistence and degradation: volatile components can be photolyzed, and steam residues can be slowly oxidized and degraded by organisms and microorganisms.

Toxicity: it has the potential of low toxicity and biochemical enrichment to prevent the growth of organisms and microorganisms.

#### 13. Disposal considerations

Residual waste: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Local disposal regulations: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### 14. Transport information

#### CNDG

UN number: 1950

UN proper shipping name: Aerosols, flammable, (each not exceeding 1 L capacity)

#### Transport hazard class(es)

Class	2.1
Subsidiary risk	-
Label(s)	2.1

Packing group

Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

#### ΙΑΤΑ

UN number: UN1950		
UN proper shipping name	e : Aerosols, flammable, Limited Quantity	
Transport hazard class(es	s): Aerosols, flammable, Limited Quantity	
Class	2.1	
Subsidiary risk	-	
Label(s)	2.1	

Packing group : Not applicable.

**Environmental hazards: No** 

ERG Code: 10L

Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft: Allowed with restrictions.

Cargo aircraft only: : Allowed with restrictions.

#### IMDG

UN number: UN1950 UN proper shipping name: A	erosols, flammable, Limited Quantity
Transport hazard class(es) Class	2.1
Subsidiary risk	-
Label(s)	2.1



Packing group : Not applicable. Environmental hazards Marine pollutant: : No Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

#### 15. Regulatory information

Regulatory information:

Regulations on the safety management of hazardous chemicals (order 344 of the state council)

Measures for the administration of hazardous chemicals registration (order No. 35 of the state economic and trade commission)

Regulations on the registration and administration of hazardous chemicals in Guangdong province (Guangdong economic and trade security [2003] No. 80)

Regulations on the safe use of chemicals in the workplace ([1996] No. 423 issued by the department of labor) Relevant provisions are made for the production, operation, storage, transportation, use and disposal of hazardous chemicals.

#### 16. Other information

#### Literary reference

- 1. Global uniform classification and labelling of chemicals (second revision), 2007
- 2. Model regulations for the transport of dangerous goods ,2015
- 3. International maritime dangerous goods (edition 34-08)
- 4. Technical manual for hazardous chemical safety, Chemical industry press, 1997
- 5. Regulations on the safety management of hazardous chemicals, 2011
- 6. Dangerous goods list (GB12268-2012)
- 7. Classification and code of dangerous goods (GB6944-2012)
- 8. Compilation of technical specification for hazardous chemical safety (GB16483-2000)
- 9. Classification and marking of common hazardous chemicals (GB13690-92)

**Professional training:** personnel engaged in the handling or transportation of dangerous goods must receive training on the content of requirements related to the handling or transportation of dangerous goods, general knowledge or familiarity training, specific functional training and safety training, etc.

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