Safety Data Sheet

Created	Jun 27, 2014

1. Chemical Product and Company Information

Product Chokugeki Shoka AE-400 Product Code : AN02417 Supplier 's Name : Yamato Protec Corporation Address : (Main Office) 5-17-2, Shirokanedai, Minato-ku, Tokyo Tel No. : 0334467151

2. Composition/Information on Ingredients (a mixture)

Ingredients	CAS* No.	JCSCL* No.	Content (Weight %)
Distilled Water	7732-18-5	-	75~85
Ethylene glycol	107-21-1	2-230	5
Carbonate	(Trade secret)	-	10~20
Surfactant	(Trade secret)	-	Less than 1.0
Nitrogen	7727-37-9		Less than 1.0

*CAS: Chemical Abstracts Service Registry Number

*JCSCL: Japanese Chemical Substances Control Law

3. Summary of Toxicity and Hazards

Signal Word	Danger
Hazards	Pressurized container : may burst if heated.
	It is detrimental to health.
Precautionary	Do not breathe dust/mist/spray.
statements	Do not get in eyes, on skin, or on clothing.

4. First Aid Measures

Contact with Eyes	*Wash immediately with clean water. *Immediate treatment by a medical specialist.
Contact with Skin	* If an external change is noticed or there is pain, have a treatment by a medical specialist.
Inhalation	* If the person feels bad after inhaling gas, keep him calm in a place where there is fresh air, and have him treated by a medical specialist.
Ingestion	* If inadvertently ingested, immediately spit out the content and wash the mouth thoroughly with water. If large amount is ingested, have a treatment by a medical specialist.

5. Fire Fighting Meas	sures
Extinguishing Media Extinguishing Methods	 * The contents do not need it for noninflammability * A person engaged in the fire extinguishing should wear suitable protective gears (fireproof clothing and eye protection) and use breathing apparatus. * Quickly remove all combustible materials from the area. * Use designated extinguishers. * If aerosol containers are present, there is a danger of rupture. When engaged in the fire fighting, persons should keep a sufficient distance away. * Containers exposed to heat should be cooled with water.
6. Accidental Releas	e Measures

- * If leak occurs (a gush out), the measures are to be taken from upwind and the leaked part of the container should be turned to upward to let all gas gush out before taking the measures.
- *Sources of combustion and high temperature items in the vicinity should be removed immediately.
- *Suitable fire extinguishers should be prepared in case of a fire brake.

7. Handling and Storage

Handling	 * The product should be handled in well ventilated areas. * Fire, sparks, and high temperature items are not allowed to be used in the vicinity. * If placed in areas where the temperature rises high, there is a danger of container rupture.
Storage	 * Store in a place where children cannot reach. * Avoid direct sunlight. * If placed in humid areas, there is a possibility of leakage or gush out due to the corrosion of the container. * Store away from fire or a source of heat. * Do not store in areas where the temperature rises above 40°C.

8. Exposure Controls and Personal Protection

Place of Use* There should be no source of high temperature by to where the product is used.*When used in enclosed areas, a ventilator should also be used.

Name of Material	Control Concentration (ppm)		
Name of Matchai	JSOH*	ACGIH (TLV-STEL)	
Ethylene glycol	Not established	100 mg/m ³ (H)	

*JSOH: Japan Society of Occupational Health

(H): Aerosol only

9. Physical and Chemical Properties

Physical State	Main Ingredient	Propellant(Nitrogen)	
State	Liquid Pressured gasses		
Color	No color,	No color,	
Odor	Odorless	Odorless	
Specific temperature or temp	erature range whereby the physical state	e changes.	
Boiling Point / Range	100°C	−195.8°C	
Vapor Pressure	No data -		
Density	1.115 (20°C)	0.967(Air=1, 1 atm, 25°C)	
рН	8.50	0 -	
Solubility	Dissolves easily in water 1.55 mL/100 mL (20°C)		

10. Hazardous Information

Product Characteristics		
	Main Ingredient	Propellant(Nitrogen)
Flashing Point	No data	-
Ignition Point		-
Explosive Limit		4000-

Reactivity	
Precaution	*When the temperature reaching above 40°C, there is danger of rupture.
Stability	* Stable under normal conditions.
	* Pressure in a container is about 0.72 MPa at room temperature.

11. Toxicological Information

Component Identity	Cancer Review IARC	Threshold \ ACGIH TLV	Value	Oral Toxicity LD50(rat)
Ethylene glycol	-	-		4000 - 10020 mg/kg

12. Ecological Information

*No data

 $\ast \mbox{When}$ leakage occurs or disposing the product, care should be taken as there may be effects on the environment.

13. Disposal Considerations

*When disposing, make sure that all content is used up.

 $\ast \mbox{The gas}$ should be completely discharged before disposing.

*Clearly separate the product from other wastes.

	* Follow the guidelines stated in 7. Handling and Storage.
	*When being transported, the container temperature should be maintained under
	40°C, and the container should be loaded in the ways that there are not tumbling, no
	falling and no damaging. Prevention of cargo collapse should be firmly undertaken.
*Land Transport	Transport in accordance with Fire Service Law and other regulations.
*Sea Transport	Transport in accordance with Ship Safety Law.
*Air Transport	Transport in accordance with Civil Aeronautics Law.
UN Classification and	Class 2
UN Number	1950

15. Regulatory Information

Consult product bulletin prior to using this material.

16. Other Information

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