Material Safety Data Sheet (MSDS)

1. Material and Company Identification

Product Name	New SV-O II
Company Name	Techno Chem Corporation
Address	1-34 Shimo-cho, Omiya-ku, Saitama, Saitama 330-0844
Phone Number	+81-48-795-8372
Emergency Contact	+81-48-795-8372
Uses	Anti rust lubricant for metal products and precision machinery Rust inhibitor for electrical equipment, motors, etc.
Creation Date	2/24/2003
Revision Date	12/9/2009

2. Hazards Identification

Specific hazards and toxicity

The following laws apply to this product. Check applicable laws before handling this product.

Category IV hazardous materials, class 3 petroleum (from Fire Service Act)

GHS Classifications

Physicochemical Hazards:	Combustible, flammable aerosol	Class 1
	High pressure gas	Liquid gas
	Flammable liquid	Not applicable
Health Hazards:	Acute toxicity (oral)	Cannot be classified
	Acute toxicity (dermal)	Cannot be classified
	Acute toxicity (inhalation-gases)	Cannot be classified
	Acute toxicity (inhalation-vapors)	Cannot be classified
	Acute toxicity (inhalation-dusts and mists)	Cannot be classified
	Skin corrosion/irritation	Cannot be classified
	Serious eye damage/eye irritation	Cannot be classified
	Respiratory sensitization	Cannot be classified
	Skin sensitization	Cannot be classified
	Germ cell mutagenicity	Cannot be classified
	Carcinogenicity	Cannot be classified
	Reproductive toxicity	Cannot be classified
	Specific target organ/systemic toxicity (single exposure)	Class 2
	Specific target organ/systemic toxicity (repeated exposure)	Class 1
	Aspiration hazard	Class 1
Environmental Hazards:	Aquatic environmental toxicity - acute	Cannot be classified
	Aquatic environmental toxicity - chronic	Cannot be classified

GHS label elements

Symbols:

Signal Words: DANGER!

Hazard Information:

Extremly combustible, highly flammable aerosol
Pressurized gas, may explode if heated
Harmful if inhaled
May be life-threatening if swallowed and enters airways
Mild skin irritation
Eye irritation

Suspected of causing genetic disorders
May adversely affect fertility and fetuses
May cause organ failure (lungs)
Prolonged or repeated exposure will cause organ failure (lungs, skin)

instructions **Safety Measures**

Keep away from heat, sparks, flames, hot objects and other possible sources of ignition.
Do not smoke.
Do not spray on flames or other sources of ignition.
Only use outdoors or in well-ventilated locations.
Pressurized container: do not puncture or incinerate, even after use.
Do not inhale this spray or its mist.
Do not let spray enter eyes.

First Aid Measures

In case of fire, extinguish using suitable methods.
Remove ignition sources if safe to do so.
Inhalation: Move to a location with fresh air and rest in position comfortable for breathing.
Ingestion: Do NOT induce vomiting.
Eye: Rinse carefully for several minutes. If contact lenses can be easily removed, remove and rinse.
Skin (or hair): Remove all contaminated clothing immediately. Wash skin with soap and water.
If feeling sick, consult a physician.

Storage

Store in a well-ventilated place shielded from sunlight.
Do not store in places reaching 40˚C or higher.
Do not store in damp, humid places.

Disposal

Contract a government licensed specialist waste disposal company to dispose of the container and contents.

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3. Information on Composition / Ingredients

Material

Single component or mixture: Mixture

	Content	Gazetted Reference No.*	CAS No.
Barium sulfonate and petroleum hydrocarbons	5-15wt%	Not specified	Not specified
Liquid paraffin	35-45wt%	(9)-1692	8042-47-5
Sorbitan monoleate	3-10wt%	(8)-63	1338-43-8
Lanolin	2-8wt%	Not specified	8006-54-0
LPG	35-45wt%	(2)-3 (2)-4 (2)-5	74-98-6 106-97-8/75-28-5 109-66-0/78-78-4

**Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.; Industrial Safety and Health Act*

Hazardous components:

PRTR Act	Not subject
Industrial Safety and Health Act, Article 57: Labeling	Not subject
Industrial Safety and Health Act, Article 57-2: Notifiable substances	Butane, pentane, mineral oil, toluene
Poisonous and Deleterious Substances Control Law	Not subject

4. First Aid Measures

Inhalation:	Move to a location with fresh air and rest in position comfortable for breathing. Cover the body with a blanket to keep warm and rest, and consult a physician immediately. If breathing is stopped or weak, loosen clothing, ensure the airway is clear and administer artificial respiration.
Skin (or hair):	Remove contaminated clothing immediately and wash skin with large amounts of soap and water. Wash contaminated clothing if it is to be reused.
Eye:	Flush eyes carefully with clean running water for several minutes. Next, if wearing contacts, remove them if able to do so easily. Continue cleaning for at least 15 minutes. If eye irritation persists, consult a physician.
Ingestion:	Consult a physician immediately and do not induce vomiting. If spray enters the mouth, wash mouth out thoroughly.
Expected acute and delayed symptoms, and most important signs and symptoms	Spray entering the mouth may cause diarrhea or vomiting. Entering the eyes may cause inflammation or irritation. Contact with skin may cause inflammation or irritation. Inhaling mist may cause nausea.
Protection for person administering emergency measures	Currently no useful information.
Special precautions for physicians	Currently no useful information.

5. Fire Fighting Measures

Extinguishing Media:	1) Loaded stream fire extinguishers, as well as foam, dry chemical or carbon dioxide fire extinguishing agents are effective. 2) Use dry chemical or carbon dioxide fire extinguishing agent if the fire has just started. 3) For large fires, using a foam fire extinguishing agent to cut off air is effective.
Prohibited Extinguishing Media:	Spraying with a steady stream of water is dangerous and may make the fire spread.
Specific hazards and toxicity for fires	1) High temperatures may cause the product to rupture. This rupture may in turn cause explosions or spread fires. 2) Combustion may generate sulfur oxides or other toxic gases.
Special fire fighting procedures:	1) Cool surrounding area and equipment by spraying water. Cut off the fire origin from sources of combustion. 2) Prohibit unauthorized staff from entering the area around the fire. 3) Move the container to a safe location if close to the fire.
Protection for people fighting the fire:	When fire fighting, stand upwind from the fire and always wear protective equipment. If expecting skin contact, wear impermeable protective equipment and gloves.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency measures	Cans are at risk of rupturing if exposed to high temperatures. Do not approach if unable to verify their safety. If there is no possibility of rupture, prepare fire fighting equipment. Wear fire fighting protective equipment.
Environmental precautions	1) Take care not to cause secondary disasters or environmental contamination by discharging into rivers or sewers. 2) If at sea: When using an oil boom extender, stay out of danger by keeping the boat outside the range of vapors. If approaching the danger zone cannot be avoided, know the conditions affecting vapor diffusion (wind direction, wind speed, gas concentration, etc.) to ensure safety.
Methods and equipment for recovery, neutralization, containment, and clean up	1) As this is a volatile substance, remove all sources of ignition immediately and stop all leaks. 2) Evacuate people from the danger area. Rope off the danger area to prevent people from entering. 3) Small amounts: Recover by soaking up with dirt, sand, sawdust, rags, etc. 4) Large amounts: Enclose the leaking fluid with a mound, cover the liquid surface with foam and recover into a container. 5) At sea: spread oil booms to prevent spreading, and absorb liquid with suction mats or like apparatus. 6) Spills: prevent spreading and skim the discharge, or recover with a suitable absorbent. Use medicinal agent only if unavoidable. If using a medicinal agent, the agent used must conform to the technical standards stipulated by the Ministry of Transport.
Secondary disaster prevention	1) Report to the authorities immediately to prevent accidents and spreading when there is a leak. 2) Immediately remove anything nearby that could ignite the product and ready extinguishing media. 3) Ingredients are heavier than air and may accumulate, so ventilate and diffuse.

7. Handling and Storage

Handling

Technical measures	1) When handling quantities above a specified amount, do so in a factory, storage facility, or office which satisfies the legally stipulated criteria. 2) Avoid contact with heat, spark, flame and hot items, and refrain from venting vapors without reason. Do not smoke. When servicing machinery and equipment with residual hazardous material, do so after completely removing the hazardous material in a safe location. 3) Wear protective equipment if there is a chance of the product coming in contact with skin or entering the eyes.
Precautions	1) Ventilate sufficiently when handling indoors. 2) If installing a ventilation system, use an explosion-proof model. 3) Do not overturn, drop, strike, drag, or other roughly handle containers.
Local exhaust system and ventilation	Refer to 8. Exposure Controls / Personal Protection.
Notes on safe handling	1) Take care not to bring in contact with halogens, strong acids, alkalies or oxidizing substances. 2) Avoid contact with heat, spark, and hot items, and refrain from venting vapors without reason. 3) Wear appropriate protective equipment to prevent inhalation and contact with eyes, skin and clothing. Take anti-static measures and use conductive work clothes and boots. Do not spray in the direction of people.

Storage

Storage conditions	1) Store in a cool, well-ventilated place, avoiding direct sunlight. 2) Close the container tightly shut and lock the storage location. 3) Designate the container as hazardous materials when storing.
Technical measures	Avoid heat, sparks, and static buildup. Use explosion-proof electrical equipment in the storage location, and ground the equipment. Always keep the container tightly closed. Do not store in direct sunlight.
Precautions	Take care not to bring into contact with halogens, strong acids, alkalies or oxidizing substances. Do not store together with such substances.
Container and packing materials	Do not tip over, drop, or strike the container in any manner. A shock could rupture the container.

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8. Exposure Controls / Personal Protection

Controlled concentrations: 50 ppm (toluene)

Allowable concentrations:

1) Japan Society for Occupational Health			3 mg/m^3 (mineral oil mist)
			50 ppm (toluene)
			500 ppm (butane)
			300 ppm (pentane)
2) ACGIH	Time-weighted average		TWA5 mg/m^3 (mineral oil mist)
			TWA20 ppm (toluene)
	TLV-TWA	Propane	1,000 ppm
		Butane	800 ppm
		Pentane	600 ppm

Equipment measures:
1) Install local exhaust ventilation and general ventilation system.
2) Provide eye and body washing facilities close to where the liquid will be handled.

Protective equipment:

Respiratory protection	Normally not needed. Wear gas mask (for organic gases) as necessary.
Hand protection	Wear oil-resistant gloves for prolonged or repeated contact.
Eye protection	Wear protective eyewear as necessary.
Skin and bodily protection	Wear long-sleeved, oil-resistant work clothing if handling over prolonged periods or if you will get wet. Remove wet clothing and clean completely before reuse.
Proper sanitary measures	Inspect protective equipment regularly using a protective equipment inspection table. Do not eat, drink or smoke while working with chemicals.

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9. Physical and Chemical Properties

State:	Liquid (in pressurized container)
Color:	Dark reddish brown
Odor:	Nearly odorless
pH:	No data
Melting point, freezing point:	No data
Flash point:	-104˚C or higher
Explosive range (explosive limit):	Upper limit: 19.0% (estimated); lower limit: 1.0% (estimated)
Vapor pressure:	No data
Vapor density:	No data

Density:	0.713 g/cm^3 (20˚C, in pressurized container)
Solubility in water:	Not soluble (water: 20˚C)
N-octanol-water partition coefficient	log Pow 2.30 (isopentane) - 3.39 (normal pentane)
Spontaneous ignition temperature:	287˚C or higher
Decomposition temperature:	No data
Odor threshold value:	No data
Evaporation rate (butyl acetate = 1):	No data
Combustibility (solid, gas):	Combustible
Pour point:	No data
Viscosity:	No data

10. Stability and Reactivity

Chemical stability:	Stable when stored at room temperature in dark location.
Materials to be avoided:	Avoid contact with strong oxidizing agents.
Conditions to avoid:	Contact with incompatible substances. Avoid sunlight, heat, flame, high temperatures, sparks, static electricity, and other ignition sources.
Incompatibility:	Take care not to bring in contact with halogens, strong acids, alkalies or oxidizing substances.
Hazardous decomposition products:	Currently no useful information.
Other:	Currently no useful information.

11. Toxicological Information

Acute toxicity:

Oral	As all components are either "not applicable," "not classified," or "cannot be classified," acute oral toxicity classification is not possible.
Dermal	As all components are either "not applicable," "not classified," or "cannot be classified," acute dermal toxicity classification is not possible.
Inhalation	Category 4: Lubricant base oils in liquid barium sulfonate (less than 5.0%) As other components are either "not applicable," "not classified," or "cannot be classified," acute inhalation toxicity classification is not possible.
Skin corrosion/irritation:	Category 3: Lubricant base oils and other oils in liquid barium sulfonate (less than 6.0%) As other components are either "not classified" or "cannot be classified," skin corrosion and irritation classification is not possible.
Serious eye damage/eye irritation:	Category 2: Lubricant base oils and other oils in liquid barium sulfonate (less than 6.0%) As other components are either "not classified" or "cannot be classified," serious eye damage and eye irritation classification is not possible.
Respiratory and skin sensitization:	As all components are either "not classified" or "cannot be classified," respiratory and skin sensitization classification is not possible.
Germ cell mutagenicity:	Category 2: Lubricant base oils in liquid barium sulfonate (less than 5.0%) As other components are either "not applicable," "not classified," or "cannot be classified," germ cell mutagenicity classification is not possible.
Carcinogenicity:	As all components are either "not classified" or "cannot be classified," carcinogenicity classification is not possible.

Reproductive toxicity:	Category 1A: Toluene in liquid barium sulfonate (less than 0.1%) As other components are either "not applicable," "not classified," or "cannot be classified," reproductive toxicity classification is not possible.
Specific target organ/systemic toxicity (single exposure)	May cause organ failure (lungs, category 2)
Specific target organ/systemic toxicity(repeated exposure)	Prolonged or repeated exposure will cause organ failure (lungs, skin; category 1)
Aspiration toxicity:	May be life-threatening if swallowed and enters airways (category 1)

12.Ecological Information

Acute aquatic environmental toxicity:	Category 2: Pentane (less than 1.5%) As other components are either "not classified" or "cannot be classified," acute aquatic toxicity classification is not possible.
Chronic aquatic environmental toxicity:	As all components are either "no information," "not classified," or "cannot be classified," chronic aquatic toxicity classification is not possible.
Persistence/biodegradability:	Currently no useful information.
Bioaccumulation potential:	Currently no useful information.
Mobility in soil:	Currently no useful information.
Other adverse affects:	Currently no useful information.
Environmental standards:	Currently no useful information.

13. Disposal Considerations

Residual waste:	1) If a government licensed disposal company or local public body is available, entrust them with disposal. 2) Dumping is prohibited.
Contaminated container and packaging:	If a government licensed disposal company or local public body is available, entrust them with disposal.

14. Transport Information

International regulations:	
Maritime regulations	According to IMO regulations.
Aviation regulations	According to ICAO/IATA regulations.
UN classification	Class 2.1
UN number	1950
National regulations:	Chemicals are to be transported using the containers and loading methods complying with the following national regulations on transportation:
Land transport	Comply with provisions in the Fire Service Act (Category IV, class 3 petroleum).
Sea transport	Comply with provisions in the Ship Safety Act (Aerosols).
Air transport	Comply with provisions in the Civil Aeronautics Act (Aerosols).
Special safety measures:	During transport, keep the chemicals out of direct sunlight, load them so that the containers will not be damaged, corrode or leak, and protect the load against collapse. Keep container temperature from rising above 40˚C.

15. Regulatory Information

Industrial Safety and Health Act:	Notifiable substances: butane, pentane, mineral oil, toluene
Pollutant Release and Transfer Register Law (PRTR Act):	n/a
Poisonous and Deleterious Substances Control Law	n/a
Fire Service Act:	Category IV Hazardous materials, Class 3 petroleum; Hazard class III

Water Pollution Control Law:	Oil emission control (5mg/L allowable concentration) Detected as n-hexane extractables
Marine Pollution and Maritime Disaster Prevention Law:	Oil emission control (prohibited)
Sewerage Service Act:	Mineral oil emission control
Wastes Disposal and Public Cleansing Law:	Industrial waste controls (dispersion and emission prohibited)

16. Other Information

References: Counsel with Japan Society for Occupational Health on acceptable concentrations (OELs)

Thresholds limit values for chemical substances and physical agents and biological exposure indies.ACGIH

European chemical substances information system

IRAC monographs on the evaluation of the carcinogenic risk of chemicals to humans volume 33.

Hazard assessments are not always sufficient. Please handle products with care.
This material safety data sheet is necessary to properly use our products and concisely lists required items. It is to be used for normal handling of this product.
The user is responsible for properly handling this product with reference to this material safety data sheet.
The content herein represents the information and manufacturer knowledge currently available. The data and evaluations are in no way to be taken as guaranteed.
This information may be revised based on law revisions or new findings.