



Material Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Production Name: Penetrating and Loosen Fluid **SuperChem863**

Date of Preparation: 06 Aug.2015

Date of Audit: 24,Oct. 2022

Company: AIGI Environmental Incorporation

81Suyuan Ave., Nanjing, China 211100

Tel: 0086 25 52788148 Fax: 0086 25 52788149

For Chemical Emergency:

Call: 800 828 9829

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classified according to 29 CFR 1910.1200/WHMIS 2015/Safe Work Australia/GHS

Flammable liquid: Flam. Liq. 4, H227

Aspiration hazard: Asp. Tox. 1, H304

Dermal Irritation: Skin Irrit. 2, H315

Specific target organ toxicity - single exposure: STOT SE 3, H336

Hazardous to the aquatic environment: Aquatic Chronic 3, H412

2.1.2. Australian statement of hazardous nature

Hazardous goods meeting Australian safe work standards.

2.1.2. Additional Information

For full text of H-statements: see SECTIONS 2.2 and 16.

2.2 Label Elements:

Classified according to 29 CFR 1910.1200/WHMIS 2015/Safe Work Australia/GHS

Signal word: Danger

Pictograms:



Hazard statement: Flammable liquid

H227 Flammable liquid

H304 May be fatal if swallowed and enters airways.

H315 May cause skin irritation.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.



- P233 Keep container tightly closed.
P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301/310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
P302/352 IF ON SKIN: wash with plenty of soap and water.
P332/313 IF SKIN irritation occurs: Get medical advice/attention.
P304/340
IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P362/364 Take off contaminated clothing and wash it before reuse.
P403/235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container by an approved waste treatment plant.

Supplementary information: None

2.3 Other hazards: None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance: Mixture

Hazardous Ingredients¹

Ingredients	% Wt.	CAS
Naphtha(petroleum), hydrotreated light	40~60	64742-53-6
Petroleum hydrotreated distillate	30~50	64742-47-8

For full text of H-statements: see SECTION 16.

* The DMSO extract content is less than 3% as measured by IP 346.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Skin contact: Wash skin with soap and water. Contact physician if irritation persists.

Eye contact: Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.

Inhalation: Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.

Ingestion: Do not induce vomiting. Contact physician immediately.

Protection of first aiders: Do not take actions involving any personal risk or without proper training. Avoid contact with products when providing assistance to victims. Avoid breathing vapor. Refer to Section 8.2.2 for personal protective equipment recommendations.

4.2. Most important symptoms and effects, both acute and delayed



May be fatal if swallowed and enters the respiratory tract. High vapor concentration can cause eye and respiratory tract irritation, dizziness, headache and other central nervous system effects. Prolonged or repeated skin contact may defat the skin and cause skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide, dry chemical, foam or water fog

Unsuitable extinguishing media: High volume water jet

5.2. Special hazards arising from the substance or mixture: None

5.3. Advice for firefighters

Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

HAZCHEM Emergency Action Code: 2 Z

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.2. Environmental Precautions : Keep out of sewers, streams and waterways.

6.3. Methods and material for containment and cleaning up

The methods of containment and removal of spilled chemicals and the disposal materials used: contain spill to a small area, keep away from ignition sources and prohibit smoking. The spill may cause the ground to slip, which shall be absorbed by sand, sawdust, clay or other inert materials and then place in a suitable container for disposal.

6.4. Reference to other sections : Refer to section 13 for disposal advice.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not smoke, eat or drink in the working area. Keep container closed when not in use. Ground and bond the container and receiving device. Steam is heavier than air and will gather at lower places. See Section 8 for exposure control and personal protection.

7.2. Conditions for safe storage: Store in a cool and dry place.

7.3. Specific end use(s) : No special precautions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limit values

Ingredients	OSHA PEL ¹		ACGIH TLV ²		AUSTRALIA ES ⁴	
	ppm	mg/m3	ppm	mg/m3	ppm	mg/m3
Oil mist/ Mineral oil	N/A	5	N/A	5	N/A	5
Petroleum hydrotreated distillate	N/A	N/A	212*	1200*	N/A	N/A

*According to the procedure described in Appendix H, reciprocating Calculation Method of Solvent Vapor in Some Refined Hydrocarbons.



Mixture of ACGIH TLV ® And BEI ® A.

¹ United States Occupational Health & Safety Administration permissible exposure limits

² American Conference of Governmental Industrial Hygienists threshold limit values

³ Australian Workplace Exposure Standards for Safe Work and Air Pollutants

Biological limit values : No biological exposure limit for components

8.2. Exposure controls

8.2.1. Engineering measures

Use only in well-ventilated areas. If exposure limits are exceeded, provide adequate ventilation. Vapors are heavier than air and will collect in low areas.

8.2.2. Individual protection measures

Respiratory protection:

Not normally needed. If exposure limits are exceeded, use a half or full-face respirator with combined dust/organic vapour filter.

Protective gloves: Chemical resistant gloves (e.g., nitrile rubber, neoprene)

Eye and face protection: Safety glasses

Skin and body protection: usually not required. If the leakage exceeds the standard, please wear rubber protective clothing, one-piece work clothes and work boots.

Hygienic measures: keep good personal hygiene habits, wash hands thoroughly after operating or handling the product, and clean work clothes and protective equipment regularly to remove pollutants; No smoking or eating in the workplace; Keep the workplace clean.

8.2.3. Environmental exposure controls

Refer to sections 6 and 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour: Blue

Odour: Mild odour

PH-Value: Not determined

Melting point: Not determined

Boiling point: Not determined

Relative density(water=1) : 0.83

Vapour density(air=1) : Not determined

Flash point(open): 86°C

Kinematic viscosity (40°C) : 3~4 mm²/s

Friction coefficient (water/oil) : <1

Auto-ignition temperature: Not determined

Explosive limit: Not determined

Water solubility: Insoluble

SECTION 10: STABILITY AND REACTIVITY

Chemical stability : Stable

Possibility of hazardous reactions : No dangerous reactions known under conditions of normal use.

Hazardous substances generated by decomposition: will not decompose under normal use conditions.

Conditions to avoid :Open flames and red hot surfaces.

Materials to avoid: strong acid, strong alkali and strong oxidant such as liquid chlorine and concentrated oxygen.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects



Primary route of exposure under normal use: Inhalation, skin and eye contact. Personnel with pre-existing respiratory ailments and dermatitis are generally aggravated by exposure.

Acute toxicity -

Substance	Test	Result
Naphtha(petroleum), hydrotreated light	LD50, rat	>5000mg/kg (estimate)
Petroleum hydrotreated distillate	LD50, rat	>5000mg/kg

Dermal:Based on available data on components, the classification criteria are not met.

Substance	Test	Result
Naphtha(petroleum), hydrotreated light	LD50, rabbit	>2000mg/kg (estimate)
Petroleum hydrotreated distillate	LD50, rabbit	>2000mg/kg

Inhalation: High vapor concentration may cause eye and respiratory tract irritation, dizziness, headache and other central nervous system effects.

Substance	Test	Result
Naphtha(petroleum), hydrotreated light	LC50, rat	>5mg/l (estimate)
Petroleum hydrotreated distillate	LC50, rat	> 5.28mg/l g

Skin corrosion/irritation: Causes skin irritation.

Substance	Test	Result
Naphtha(petroleum), hydrotreated light	Skin irritation, rabbit	Not irritating
Petroleum hydrotreated distillate	Skin irritation, rabbit	Not irritating Mildly irritating Moderately irritating

Serious eye damage/ irritation: Based on available data on components, the classification criteria are not met.

Substance	Test	Result
Naphtha(petroleum), hydrotreated light	Eye irritation, rabbit	Not irritating
Petroleum hydrotreated distillate	Eye irritation, rabbit	Not irritating Mildly irritating Moderately irritating



Respiratory or skin sensitisation:

Substance	Test	Result
Naphtha(petroleum), hydrotreated light	Skin sensitization, guinea pig	Not sensitizing
Petroleum hydrotreated distillate	Skin sensitization, guinea pig	Not sensitizing

Germ cell mutagenicity:

Naphtha (petroleum), hydrotreated light, White mineral oil (petroleum): based on available data, the classification criteria are not met. Barium bis(dinonylnaphthalenesulphonate): In vitro test, bacteria, negative.

Carcinogenicity:

This product contains no carcinogens as listed by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), the Occupational Safety and Health Administration (OSHA) or the European Chemicals Agency (ECHA).

Reproductive toxicity:

Naphtha (petroleum), hydrotreated light, White mineral oil (petroleum): based on available data, the classification criteria are not met. Barium bis(dinonylnaphthalenesulphonate): no known significant effects or critical hazards.

STOT – single exposure:

May cause drowsiness or dizziness.

STOT – repeated exposure: Reports have associated repeated or prolonged occupational overexposure to all solvents with permanent brain and nervous system damage. Naphtha (petroleum), hydrotreated light, 2-(2- Butoxyethoxy)ethanol, White mineral oil (petroleum): based on available data, the classification criteria are not met.

Aspiration hazard:

Not expected to be an aspiration toxicant based on viscosity.

Other information: None known

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

12.1. Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment, based on data from similar materials.

12.2. Persistence and degradability



Naphtha (petroleum), hydrotreated light: expected to be readily biodegradable, based on data from similar materials; expected to degrade rapidly in air. Naphtha (petroleum), hydrotreated heavy: not readily biodegradable. (Biodegradation: 31% OECD 301F, 28 days).

12.3. Bioaccumulative potential

Naphtha (petroleum), hydrotreated heavy: not expected to bioaccumulate. Hydrogenated light fraction (petroleum), octanol/water partition coefficient (log Kow): estimated to be 2.1 – 5.

12.4. Mobility in soil

Liquid, insoluble in water. Floating on the water. Hydrogenated heavy naphthenic distillates (petroleum): potentially penetrated soil and contaminated groundwater in case of massive quantity. Naphtha (petroleum), hydrotreated light: this substance is highly volatile and will rapidly evaporate to the air if released into the environment. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

12.5 Other adverse effects : None known

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal suggestion: dispose of waste according to applicable laws. Contaminated packaging : uncontaminated packaging can be recycled. Dispose of waste in accordance with applicable laws.

SECTION 14: TRANSPORT INFORMATION

UN number or ID number

ADG/ADR/RID/ADN/IMDG/ICAO: not applicable

TDG: not applicable

US DOT: not applicable

UN proper shipping name

ADG/ADR/RID/ADN/IMDG/ICAO: not applicable

TDG: not applicable

US DOT: not applicable

Transport hazard class(es)

ADG/ADR/RID/ADN/IMDG/ICAO: not applicable

TDG: not applicable

US DOT: not applicable

Packing group

ADG/ADR/RID/ADN/IMDG/ICAO: not applicable

TDG: not applicable

US DOT: not applicable

Environmental hazards : no environmental hazards

Special precautions for user : no special precautions for users

Bulk shipping according to IMO documents: not applicable



SECTION 15: REGULATORY INFORMATION

This MSDS complies with the following national standards

- 《Content and Project Sequence of Safety Data Sheet for Chemicals 》 (GB/T16483-2008)
- 《General Rules for Classification and Hazard Publicity of Chemicals 》 (GB13690-2009)
- 《Classification and Name Number of Dangerous Goods 》 (GB6944-2012)
- 《Classification Method for Transport Packaging of Dangerous Goods 》 (GB/T15098-2008)
- 《Guidelines for the Preparation of Labels of Hazardous Chemicals 》 (GB15258-2009)
- 《Classification and Name Number of Dangerous Goods 》 (GB6944-2012)
- 《Packaging Marks for Dangerous Goods 》 (GB190-2009)
- 《Pictorial Marks for Packaging, Storage and Transportation 》 (GB/T191-2008)
- 《List of Dangerous Goods 》 (GB12268-2012)
- 《General Rules for Storage of Common Dangerous Goods 》 (GB15603-1995)
- 《General Technical Conditions for Transport Packaging of Dangerous Goods 》 (GB12463-1990)
- 《General Rules for Classification and Safety of Chemicals 》 (GB13690-2009)
- 《Specifications for Classification and Labeling of Chemicals 》 (GB30000)

And the following rules:

- 《Provisions on the Administration of Road Transport of Dangerous Goods 》 (Decree No. 2, 2013 of the Ministry of Transport of the People's Republic of China)
- 《Regulations on the Administration of Railway Transport of Dangerous Goods 》 (2008 Edition of the Ministry of Railways of the People's Republic of China)
- 《Regulations on the Safety Management of Hazardous Chemicals 》 (promulgated by the State Council in 2013)
- 《List of the Most Common Dangerous Goods 》
- 《Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes 》
- 《Recommendations on the Transport of Dangerous Goods 》 United Nations (UN TRDG)

SECTION 16: OTHER INFORMATION

Key literature references

1. Zhou Guotai, Safety Technology of Dangerous Chemicals, Chemical Industry Press, 1997
2. Toxic Chemicals Management Office of the State Environmental Protection Administration, Beijing Institute of Chemical Industry, Environmental Data Manual of Chemical Toxicity Regulations, China Environmental Science Press, 1992
3. New Safety Manual for Dangerous Goods, Chemical Industry Press, April 2001
4. 《Catalogue of Hazardous Chemicals (2015 Edition)》

This information is based solely on data provided by suppliers of the materials used, not the product itself; No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability. For the reasons of using it for special purposes, not following the recommended recommendations, for any damage or injury caused by any inherent danger of this substance, or for use under some circumstances beyond our control and unfamiliar to us, we will not bear any responsibility for the consequences after use.



AIGI ENVIRONMENTAL INC.
A Subsidiary of AIGI Group

Seal Machining Technology • Hydraulic & Rotary Seal • Pipeline Connection

MSDS SuperChem 863