



SUPERFINE™
BASE OIL

Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: SUPERFINE Base Oil
Recommended Use: Base Oil

Company Name: Hydrodec of North America, LLC
Address: 2021 Steinway Boulevard, SE
Canton OH 44707
Telephone: (330) 454-8202
Fax: (330) 454-8870
Website: www.hydrodec.com
Emergency Contact: CHEMTREC (800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

Globally Harmonized System (GHS) Classification

Aspiration hazard, Category 1

GHS Label Elements Symbols



GHS Signal Words

Danger

GHS Hazard Statements

Physical Hazards: Not classified under GHS
Health Hazards: May be fatal if swallowed and enters airways
Environmental Hazards: Not classified under GHS

GHS Precautionary Statements

Prevention: No precautionary phrases
Response: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.
Storage: Not Applicable
Disposal: Dispose of waste product or used containers according to local regulations



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SECTION 2: HAZARDS IDENTIFICATION - CONTINUED

Other Potential Health Effects

Eyes: May be an eye irritant.

Skin: Repeated or prolonged skin contact may lead to irritation and dermatitis.

Ingestion: Swallowing can result in nausea, vomiting and irritation of gastrointestinal tract.

Inhalation: At elevated temperatures, vapor may be an irritant to mucous membranes and respiratory tract.

Hazardous Material Identification System (HMIS) Ratings: Health: 1 Fire: 1 Reactivity 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic Hazard

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Component	Percent
64742-53-6	Hydrotreated naphthenic mineral oil	>99

SECTION 4: FIRST AID MEASURES

First Aid: Eyes

If this product comes in contact with the eyes:

- > Wash out immediately with fresh running water.
- > Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- > Seek medical attention without delay; if pain persists or recurs seek medical attention.
- > Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

First Aid: Skin

If skin contact occurs:

- > Immediately remove all contaminated clothing, including footwear.
- > Flush skin and hair with running water (and soap if available).
- > Seek medical attention in event of irritation.

First Aid: Ingestion

- > **If swallowed do NOT induce vomiting.**
- > If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- > Observe the patient carefully.
- > Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- > Give water to rinse out mouth, then provide liquid slowly and as much as the injured person can comfortably drink.



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SECTION 4: FIRST AID MEASURES - CONTINUED

First Aid: Inhalation

- > If fumes or combustion products are inhaled, remove patient from contaminated area.
- > Lay patient down. Keep warm and rested.
- > Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- > Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained.
- > Perform CPR if necessary.
- > Transport to hospital or doctor.

Indication of any immediate medical attention and special treatment needed

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- > Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- > Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ 50 mm Hg) should be intubated.
- > Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- > A chest x-ray should be taken immediately after stabilization of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- > Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitization to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- > Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology] Treat symptomatically.
- > Heavy and persistent skin contamination over many years may lead to dysplastic changes. Pre-existing skin disorders may be aggravated by exposure to this product.
- > In general, emesis induction is unnecessary with high viscosity, low volatility products, i.e. most oils and greases.
- > High pressure accidental injection through the skin should be assessed for possible incision, irrigation and/or debridement.

NOTE: Injuries may not seem serious at first, but within a few hours tissue may become swollen, discolored and extremely painful with extensive subcutaneous necrosis. Product may be forced through considerable distances along tissue planes.



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SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide, foam or dry chemical powder. Water mist or fog may be used. Do not use direct water jet or stream, material will float on water and may re-ignite on the surface of water.

Hazardous Combustion Products

On burning may emit oxides of carbon and nitrogen, smoke and other toxic fumes.

Fire Incompatibility

Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc., as ignition may result.

Fire Fighting

- > Alert Fire Brigade and tell them location and nature of hazard.
- > Wear breathing apparatus plus protective gloves.
- > Prevent, by any means available, spillage from entering drains or water course.
- > Use water delivered as a fine spray to control fire and cool adjacent area.

Fire/Explosion Hazard

- > Combustible.
- > Slight fire hazard when exposed to heat or flame.
- > Heating may cause expansion or decomposition leading to violent rupture of containers.
- > On combustion, may emit toxic fumes of carbon monoxide (CO).

National Fire Prevention Authority (NFPA) Ratings: Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Slippery when spilled. Remove all ignition sources and clean up all spills immediately. Avoid contact with skin and eyes. Wear protective gloves, safety glasses, and other body protection that may be appropriate based on the size and conditions of the spill. If oil mist is present, use a cartridge respirator.

Methods and materials for containment and cleaning

Small Spills: Wipe up with absorbents, rags, or paper towels. Collect and seal in properly labeled containers or drums for disposal in accordance with local, state and federal requirements.

Large Spills: Work up wind or increase ventilation. Prevent the spill from entering drains and waterways using absorbents, soil, or other inert material. Collect the material and seal in properly labeled containers or drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services.



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SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

- > Avoid eye contact and repeated or prolonged skin contact.

Conditions for safe storage, including any incompatibilities

- > Store in original containers.
- > Keep containers securely sealed.
- > No smoking, naked lights or ignition sources.
- > Store in a cool, dry, well-ventilated area.
- > Avoid reaction with oxidizing agents.

Other Information

- > Classified as a Class IIIB, combustible liquid. (NFPA 30)
- > Classified as a C1, combustible liquid. (AS 1940, Australia)
- > This material is a scheduled poison S5. (SUSMP, Australia)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

No value assigned for this specific material, however the following exposure standards may apply:

Chemical Name	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Hydrotreated naphthenic mineral oil (as oil mist)	5 mg/m ³	n/a	5 mg/m ³	10 mg/m ³

Engineering Controls

Adequate ventilation should be provided whenever the material is heated or mists are generated.

Personal Protective Equipment

Eyes/Face

- > Safety glasses with side shields.
- > Chemical goggles.
- > Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Hands/Feet

- > Wear chemical protective gloves, e.g. PVC, Nitrile, Neoprene.
- > Wear safety footwear or safety gumboots, e.g. Rubber.



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory

- Normally not required, but if airborne concentrations are above the applicable exposure limits, use an approved respirator.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to pale yellow liquid	Upper/Lower Explosive Limit(%)	Not Available
Odor	None to mild petroleum odor	Vapor pressure	Not Available
Odor threshold	Not Available	Vapor density (Air=1)	Not Available
pH	Not Applicable	Specific gravity (Water=1)	0.875
Melting/Freezing point	<-40°F (<-40°C)	Solubility in water (g/L)	Immiscible
Boiling point	>554°F (>290°C)	Partition coefficient	Not Available
Flash point	>293°F (>145°C)	Auto-ignition temperature	Not Available
Evaporation rate	Not Available	Decomposition temperature	Not Available
Flammability	Not Applicable	Viscosity	8-12 cSt

SECTION 10: STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients.

Chemical Stability

This material is stable under normal conditions.

Possibility of Hazardous Reactions

Incomplete combustion is likely to give rise to a complex mixture of gases including carbon dioxide, hydrogen sulfide, sulfur oxides, sulfuric acid, and other organic and inorganic compounds.

Conditions to Avoid

Elevated temperatures, oxidizing agents, and sources of ignition.

Incompatible Materials

Keep away from extreme heat and oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon and nitrogen, smoke and other toxic fumes.



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SECTION 11: TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is handled incorrectly and exposure occurs are:

Inhalation

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralizing the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs.

Ingestion

Accidental ingestion of the material may be damaging to the health of the individual. Ingestion of petroleum hydrocarbons may produce irritation of the pharynx, esophagus, stomach and small intestine with edema and mucosal ulceration resulting; symptoms include a burning sensation in the mouth and throat. Large amounts may produce narcosis with nausea and vomiting, weakness or dizziness, slow and shallow respiration, swelling of the abdomen, unconsciousness and convulsions. Myocardial injury may produce arrhythmias, ventricular fibrillation and electrocardiographic changes.

Skin Contact

Limited evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals for up to four hours; such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterized by skin redness (erythema) and swelling (edema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular edema of the spongy layer of the skin (spongiosis) and intracellular edema of the epidermis.

Eye Contact

Limited evidence exists, or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals and/or is expected to produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterized by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur. Petroleum hydrocarbons may produce pain after direct contact with the eyes. Slight, but transient disturbances of the corneal epithelium may also result.



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SECTION 11: TOXICOLOGICAL INFORMATION - CONTINUED

Long Term (Chronic) Effects

Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

Repeated or prolonged exposure to mixed hydrocarbons may produce narcosis with dizziness, weakness, irritability, concentration and/or memory loss, tremor in the fingers and tongue, vertigo, olfactory disorders, constriction of visual field, paraesthesias of the extremities, weight loss and anemia and degenerative changes in the liver and kidney. Chronic exposure by petroleum workers, to the lighter hydrocarbons, has been associated with visual disturbances, damage to the central nervous system, peripheral neuropathies (including numbness and paraesthesias), psychological and neurophysiological deficits, bone marrow toxicities (including hypoplasia possibly due to benzene) and hepatic and renal involvement. Chronic dermal exposure to petroleum hydrocarbons may result in defatting which produces localized dermatoses.

Carcinogenicity

Based on OSHA 1910.1200 and International Agency for Research on Cancer (IARC) study requirements, this product does not require labeling. OSHA does not list this product as a potential carcinogen. Product has a high probability of being non-carcinogenic according to the Modified Ames Assay.

SECTION 12: ECOLOGICAL INFORMATION

DO NOT discharge into sewer or waterways.

Advise local emergency services if contamination of sewers or waterways has occurred.

Ecotoxicity

Available data indicate this product is not acutely toxic. 96 hr. acute static toxicity for *Pimephales promelas* (Fathead Minnow) LC50 mortality is greater than 30,000 mg/L. Other similar products have shown 48 hr EL50 for *Daphnia magna* greater than 1000 mg/L, and 96 hr IrL50 for *Scenedesmus subspicatus* (Alga) greater than 1000 mg/L.

Persistence and Degradability

This product reaches less than 10% biodegradation in standard 28-day test and is not readily biodegradable in the environment.

Bioaccumulative Potential

No information available.

Mobility

No information available.



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SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Instructions

Consider recycling, do not flush to drain / storm sewer.
 All wastes must be handled in accordance with local, state and federal regulations.
 See Section 7 for Handling Procedures.
 See Section 8 for Personal Protective Equipment recommendations.
 See Section 12 for other Ecological Information.

SECTION 14: TRANSPORT INFORMATION

Ground Transport

Not regulated by US Department of Transportation (DOT) .
 Not regulated by Canada Transport of Dangerous Goods (TDG).
 Not regulated by Australian Dangerous Goods (ADG) Code .

Marine Transport

Not regulated by the International Maritime Organization (IMO) International Maritime Dangerous Goods (IMDG) Code.

Air Transport

Not regulated by International Air Travel Association (IATA).
 Not regulated by International Civil Aviation Organization (ICAO).

SECTION 15: REGULATORY INFORMATION

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) / Superfund Amendments and Reauthorization Act (SARA)

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 327.65), or CERCLA (40 CFR 302.4).

State Lists

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Hydrotreated naphthenic mineral oil	64742-53-6	No	Yes	No	No	No	No

Canada Workplace Hazardous Materials Information System (WHMIS) Ingredient Disclosure List

No components listed.



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SECTION 16: OTHER INFORMATION

Other Information

The information herein is presented in good faith and, to the best of our knowledge, is accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the responsibility of the end user to ensure that the material is fit for their purpose and that their activities comply with Federal, State or provincial and local laws.

All materials may present unknown hazards and should be used with caution. Although particular hazards are described herein, we acknowledge that this information is not all-inclusive in all circumstances.

This Safety Data Sheet supersedes all previous versions by the issue date displayed. Please contact the issuer to ensure this is the current version.

Key/Legend

CAS = Chemical Abstracts Service; OSHA = Occupational Safety and Health Administration; ACGIH = American Conference of Governmental Industrial Hygienists; NIOSH = National Institute for Occupational Safety and Health; TWA=Time Weighted Average; TLV=Threshold Limit Value; STEL=Short Term Exposure Limit;