STANADYNE®

Material Safety Data Sheet

Material Name: Performance Formula Junior® **ID: 2602**

* * * Section 1 - Chemical Product and Company Identification * * *

Product Numbers: 38569P (24/8 oz); 38570P/C (12/1 pint); 38571P/C (6/½ gal); 38572P (5 gal); 38573P (55 gal)
Chemical Name: Mixture
Product Use: Diesel Fuel Additive
Company Information

Stanadyne Corporation
92 Deerfield Road
Windsor, CT 06095-4209

Phone: 1-800-842-2496 or 1-860-525-0821
Emergency # CHEMTREC 1-800-424-9300;
CHEMTREC (Outside US & Canada) 1-703-527-3887

* * * Section 2 - Composition / Information on Ingredients * * *

CAS #	Component	Percent (w/w)
8042-41-3	Stoddard solvent	70-90
64742-94-5	Naphtha (petroleum), heavy aromatic	5-10
95-63-6	1,2,4-Trimethylbenzene	1-5
25551-13-7	Trimethylbenzene (mixed)	0.1-1.0
91-20-3	Naphthalene	0.1-1.0; 1-2

Component Information/Information on Non-Hazardous Components
This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). The ranges noted above are per an interpretation contained in Health Canada Product Safety Bulletin effective 96/03/31.

* * * Section 3 - Hazards Identification * * *

Emergency Overview
WARNING Combustible liquid and vapor.
This product is irritating to the eyes, respiratory system and skin. Excessive inhalation of this material causes headache, dizziness and uncoordination. This product may cause nervous system effects including peripheral neuropathy. Components of this product may have adverse effects on the blood-forming system. Irritating and toxic vapors may be released during combustion of product. Extinguish fire with carbon dioxide, dry chemical, foam or water fog.

Potential Health Effects: Eyes
This product is irritating to the eyes. Effects may include a burning sensation, redness, swelling and/or blurred vision.

Potential Health Effects: Skin
This product is irritating to the skin. Prolonged or repeated contact with this product may dry and/or defat the skin. Symptoms may include redness, edema, drying or cracking of skin. Blisters and sores may develop. Product contains a component(s) which may be absorbed through the skin. May cause allergic reaction in susceptible individuals.

Potential Health Effects: Ingestion
This product is harmful if swallowed. May cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain. Ingestion of this product may cause headache, dizziness, uncoordination, and general weakness. Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury, possibly death. Ingestion of this product may cause central nervous system (CNS) depression characterized by nausea, dizziness, headache, lack of coordination, loss of consciousness and coma.

Potential Health Effects: Inhalation
Harmful if inhaled. Inhalation of oil mists or fumes can cause irritation of the mucous membranes and upper respiratory tract. Excessive inhalation of this material causes headache, dizziness, nausea, stupor, and other central nervous system effects leading to visual impairment, difficulty breathing, memory loss, convulsions and uncoordination. Repeated and prolonged overexposure to oil mists may result in droplet deposition, oil granuloma formation, inflammation and increased incidence of infection. Breathing of vapor or mist may aggravate asthma and inflammatory or fibrotic pulmonary disease.

HMIS Ratings: Health: 2* **Fire:** 2 **Reactivity:** 0 **Pers. Prot.:** impervious gloves/safety glasses (chemical goggles if splashing is possible)
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes
Quickly and gently blot away excess chemical. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the chemical is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Seek immediate medical attention.

First Aid: Skin
Remove contaminated clothing. Quickly and gently blot away excess chemical. Wash gently and thoroughly with warm water and non-abrasive soap for 20 minutes or until the chemical is removed. Get medical attention if skin disorder develops.

First Aid: Ingestion
Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 8 to 10 oz of water to dilute material in stomach. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Repeat administration of water. Seek immediate medical attention or advice.

First Aid: Inhalation
If affected, remove source of contamination or move individual to fresh air. If the affected person is not breathing, trained personnel should begin artificial respiration immediately. Seek medical attention if symptoms persist. If overcome by vapor from hot product, immediately remove to fresh air and call a physician.

First Aid: Notes to Physician
Pulmonary aspiration hazard if swallowed; treat symptomatically.

* * * Section 5 - Fire Fighting Measures * * *

Flash Point: 114° F (45.1° C) by Pensky Martens Closed Cup **OSHA Flammability Classification:** Combustible

General Fire Hazards
Fire and explosion hazards are moderate when this product is exposed to heat or flame. Liquid can burn upon heating to temperatures at or above the flash point. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back.

Hazardous Combustion Products
Irritating and toxic gases or fumes may be released during a fire. Upon combustion, this product may yield oxides of nitrogen, carbon monoxide, carbon dioxide, and/or other low molecular weight hydrocarbons.

Extinguishing Media
Dry chemical, foam, carbon dioxide, water fog. Use water to cool fire-exposed containers and to protect personnel. Direct water spray or foam may cause frothing and spattering. If a leak or spill has not ignited, use water spray to disperse vapors and to flush spills away from exposure.

Fire Fighting Equipment/Instructions
Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

NFPA Ratings: Health: 2 **Fire:** 2 **Reactivity:** 0 **Other:**
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Containment Procedures
Stop the flow of material, if this can be done without risk.

Clean-Up Procedures
Absorb with non-flammable suitable absorbent such as sand or earth. Scoop up used absorbent into drums or other appropriate container.

Evacuation Procedures
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Special Procedures
Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Surfaces may become slippery after spillage. Wear appropriate protective equipment and clothing during cleanup. Do not allow the spilled product to enter public drainage systems or open watercourses. If product is spilled, notify appropriate authorities at the local, state, federal and provincial levels.

* * * Section 7 - Handling and Storage * * *

Handling Procedures
Avoid prolonged or repeated skin contact with this material. Avoid getting this material into contact with your eyes. Avoid the generation of mists. Wash thoroughly after handling. Use this product with adequate ventilation. Discard any shoes or clothing items that cannot be decontaminated.

Storage Procedures
Do not store near heat, sparks, open flame or strong oxidizing agents. Do not store this material in open or unlabeled containers. Store drums in a covered area with secondary containment. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode. Follow appropriate grounding procedures.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Exposure Guidelines

A: General Product Information

Follow all applicable exposure limits. Under conditions which may generate mists, the component supplier recommends the OSHA PEL of 5 mg/m3 and the ACGIH STEL of 10 mg/m3 for oil mists.

B: Component Exposure Limits

Compound	ACGIH		NIOSH		OSHA	
	TWA	STEL	TWA	STEL	TWA	STEL
Stoddard solvent	100 ppm	N/E	350 mg/m3	N/E	500 ppm	N/E
1,2,4-trimethylbenzene	25 ppm	N/E	25 ppm	N/E	N/E	N/E
Trimethylbenzene (mixed)	25 ppm	N/E	N/E	N/E	N/E	N/E
Naphthalene	10 ppm	15 ppm	10 ppm	15 ppm	10 ppm	N/E

(S) – skin exposure
(C) – ceiling exposure
N/E – none established

Engineering Controls
Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face
Wear safety glasses. Wear chemical goggles or faceshield if mist is likely to occur.

Personal Protective Equipment: Skin
Use impervious gloves. Wear oil-impervious garments if contact is unavoidable.

Personal Protective Equipment: Respiratory
In the event of excessive exposure to vapors/mists/fumes, use NIOSH/OSHA approved respiratory equipment. Respirator should be selected on the basis of form and concentration of contaminant.

Personal Protective Equipment: General
Use good hygiene when handling petroleum product. Launder contaminated clothing before reuse. Excessive misting may cause slippery floors - wear appropriate footwear. Eye wash fountains are recommended.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance: Amber Colored
Physical State: Liquid
Solubility (H2O): Negligible
Odor: Oil / solvent
Specific Gravity: 0.80

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability
Stable
Incompatibility
This product may react with strong oxidizing agents.
Hazardous Decomposition
Decomposition of this product may yield oxides of nitrogen, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Hazardous Polymerization
Hazardous polymerization will not occur.

* * * Section 11 - Toxicological Information * * *

No data available on product as a whole.

CAS #	Component	Percent	LD50 – Oral (rat)	LD50 – Dermal (rabbit)	LC50 – Inhalation (rat)
8052-41-3	Stoddard solvent	70-90	> 5000 mg/kg	Not available	> 5,500 mg/m3 (4H)
95-63-6	1,2,4-Trimethylbenzene	≤5	5 g/kg	Not available	18 g/m3 (4H)
91-20-3	Naphthalene	≤2	490 mg/kg	> 20 g/kg	> 340 mg/m3 (1H)

One or more components have produced damage after prolonged exposure in laboratory animals to one or more of the following: kidneys, liver, spleen, blood and/or circulatory system. Naphthalene has been shown to cause cancer in laboratory animals and is classified Group 2B by IARC.

A summary of toxicity data for components of this product is available upon request.

* * * Section 12 - Ecological Information * * *

No ecotoxicity or environmental fate data available on product as a whole.

A summary of aquatic toxicity data for components of this product is available upon request.

* * * Section 13 - Disposal Considerations * * *

US EPA Waste Number & Descriptions
User must test waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. If disposed of as shipped, this product may be considered a D001 ignitable waste.
Disposal Instructions
Dispose of waste material according to local, state, federal, and provincial environmental regulations. Do not allow this material to drain into sewers/water supplies. Material should be recycled if possible.

* * * Section 14 - Transportation Information * * *

General Transportation Information
NOTE: Information in this section (Section 14) is presented as a guide only. Requirements may very depending upon package size and exceptions used, if any. Follow current, applicable requirements under DOT, TDG, IMO/IMDG, ICAO/IATA to ensure regulatory compliance.

U.S. Department of Transportation Regulations Ground Transportation
Not regulated based on Combustible Liquid exception [49CFR 173.150(f)].
Canadian TDG Regulations Ground Transportation
Not regulated based on exception, Canada TDG, Part I, Section 1.33.
International Transportation Regulations
ICAO/IATA
UN1268, Petroleum distillates, n.o.s., 3, PGIII
Label: Flammable liquid
IMO/IMDG
UN1268, Petroleum distillates, n.o.s. 3, PGIII, (45.1°C c.c.) Marine Pollutant (petroleum naphthas)
EmS: F-E, S-E
Label: Flammable liquid

* * * Section 15 – Regulatory Information * * *

US Federal Regulations
A: General Product Information
Components listed in Section 2 of the MSDS are present on the TSCA Inventory.
This product contains naphthalene which is subject to TSCA §12(b) export notification.
This product is a registered fuel additive (40 CFR 79) – Registration #1255-0010.
B: Component Analysis
This material contains the following chemicals required to be identified under SARA Section 313 (40 CFR 372.65).
1,2,4-Trimethylbenzene (95-63-6)
Naphthalene (91-20-3)
C: Component Marine Pollutant
This material contains petroleum naphthas which are required by US DOT to be identified as a marine pollutant.
Other Regulations
Components listed in Section 2 of the MSDS are present on the DSL and EINECS Inventories. This product has been classified in accordance with the hazard criteria required by the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations.*

WHMIS Classification: B3, D2A, D2B

* * * Section 16 - Other Information * * *

Other Information
The information and recommendations presented in this Material Safety Data Sheet are based on sources believed to be reliable on the date hereof. Stanadyne Corporation makes no representation on its completeness or accuracy. This product is sold "as is" and it is the user's responsibility to determine the product's suitability for its intended use, the product's safe use, and the product's proper disposal. The statements and descriptions provided are informational only and no representations or warranties, either expressed or implied, of merchantability or fitness for a particular purpose or of any other nature are made with respect to the information provided in this Material Safety Data Sheet or to the product to which such information refers. Stanadyne Corporation neither assumes nor authorizes any other person to assume for it, any other or additional liability or responsibility resulting from the use of, or reliance upon, this information. Stanadyne Corporation assumes no responsibility for injury to recipient or to third persons or for any damage to any property and recipient assumes all such risks.

Key/Legend
N = No; Y = Yes; ppm - parts per million; mg/m3 = milligrams per cubic meter of air; ACGIH = American Conference of Governmental Industrial Hygienists; OSHA = Occupational Safety and Health Administration; TLV = Threshold Limit Value; NIOSH = National Institute of Occupational Safety and Health; NTP = National Toxicology Program; IARC = International Agency for Research on Cancer; TSCA = Toxic Substance Control Act; DSL = Dangerous Substances List; EINECS = European Inventory of New and Existing Chemical Substances

Contact: For further information call 1-800-842-2496 or 1-860-525-0821

This is the end of MSDS #2602