

Material Safety Data Sheet

Product:

Engine Flush

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TDS Nr: 512-2000

Version: 1.01

Date: 21/10/1999

1. Identification of the substance/preparation and of the company/undertaking.

Type of product and use: Additive for oil.
Company identification: WYNN'S BELGIUM N.V.
Address and telephone Nr.: Industriepark West 46
B-9100 Sint-Niklaas
tel: INT-32-3-766.60.20
fax: INT-32-3-778.16.56
Emergency phone Nr.: INT-32-70-245.245

2. Composition/information on ingredients.

Composition: Mixture of dispersants and detergents in petroleum distillates.
Hazardous component(s): Distillates (petroleum), hydrotreated light (CAS n°: 64742-47-8)
wt%:60-80 Symbol(s):Xn R-Phrase(s):40, 65
Amides, vegetables-oil, N,N-bis(hydroxyethyl) (CAS n°: 68155-26-0)
wt%:01-05 Symbol(s):Xi R-Phrase(s):36/38
Zink alkyl phosphorodithioate (CAS-n°:68412-58-8)
wt%:01-05 Symbol(s):Xi R-Phrase(s):38-41

3. Hazards identification.

Important hazards-fire: Moderate hazard. liquids can release vapors that can form flammable mixtures upon moderate heating to temperatures at or above the flash point.
The vapours are heavier than air, spreads along the ground.
Product can accumulate electrostatic charges which can cause an incendiary electrical discharge.

Important hazards-toxicity: Nocive, can damage operators' lungs in case of ingestion.
Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
May cause nausea, dizziness and/or vomiting.
May cause loss of consciousness or other central nervous system effects.

Important hazards-chemical reactions: No data available.

Environmental hazards: To the best of our knowledge and normal usage, no effect on the environment.

4. First-aid measures.

Inhalation: Using proper respiratory protection, immediately remove the affected victim from exposure.
If aspiration is suspected (during vomiting, for instance), seek medical advice urgently.
Remove to fresh air.
In case of loss of consciousness, give artificial respiration.

Skin contact: Remove contaminated clothing.
Continue rinsing for at least 10 minutes.

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Eye contact: If inflammation or irritation persists, seek medical advice.
Launder contaminated clothing before reuse and discard shoes and other leather articles saturated with the material.
Keep eyelids apart.
Continue rinsing for at least 10 minutes.

Ingestion: If inflammation or irritation persists, seek medical advice.
If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.
If conscious, give 3 or 4 capsules of active carbon (i.e. NORIT®) together with some water.
Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal.
Seek medical advice.

5. Fire - fighting measures.

Extinguishing media:
- Suitable: Carbon dioxide, dry chemicals, foam (AFFF/ATC), water spray (fog).
- Not to be used: Water jet.

Firefighting instructions: Use water spray to cool fire exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect men attempting to stop a leak.
Try to cover liquid spills with foam (AFFF/ATC).
Either allow fire to burn under controlled conditions or extinguish with foam (AFFF/ATC) or dry chemical.
The vapours are heavier than air, spreads along the ground.

Special exposure hazards: Fumes, smoke, carbon dioxide (CO₂), carbon monoxide (CO) (Toxic).

Special protective equipment for fire fighters: Full protective clothing and self-containing breathing apparatus.

6. Accidental release measures.

Personal precautions: Personal Protective Equipment must be worn, see section 8 (Personal Protection).
Ensure good ventilation.

Methods for cleaning up:
- On soil: Avoid contact.
Vapors may be harmful.
Remove sources of ignition.
Keep public away.
Inform local police and/or fire brigade.
Shut off source if possible to do so without hazard.
Take measures to minimize the effect on the ground water.

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Absorb small spills on dry chemical absorbent.
Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent.
Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

- On water:
Remove sources of ignition.
Eliminate sources of ignition. Warn occupants and shipping in downwind areas of fire and explosion hazard and request them to stay clear.
Notify port or relevant authorities and keep public away. Shut off source if possible to do so without danger. Confine if possible.
Remove from surface by skimming or with suitable absorbents. If allowed by local authorities and environmental agencies sinking and/or suitable dispersants may be used in non-confined waters.
Consult an expert on disposal of any recovered material and ensure conformity to local disposal regulations.

7. Handling and storage.

Handling:

Handle in accordance with good industrial hygiene and safety procedures.
Do not breathe vapour.
Avoid contact with skin and eyes.
Do not smoke.
Ensure good ventilation.
Avoid proximity or contact with hot surfaces, flames or sparks.
Material will accumulate static charges which may cause an electrical spark (ignition source).
Use proper grounding procedures.
Open slowly in order to control possible pressure release.
Do not pressurize, cut, heat, or weld containers (empty product containers may contain product residue).
DO NOT handle, store or open near an open flame, sources of heat or sources of ignition.

Storage:

Keep containers closed when not in use.
Keep away from all sources of ignition.
Store in a well ventilated place.
Protect from sunlight and do not expose to temperature exceeding 50°C.
Avoid contact with strong acids and oxidizers.
Keep container tightly closed.
Store in dry, cool, well ventilated area.

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Packaging:

- General:

Container remains hazardous when empty. Continue to observe all precautions.
DO NOT reuse empty containers without commercial cleaning or reconditioning.
Keep preferably in the original packaging; if not, copy all indications of the labelling on the new packaging.

- Suitable:

Polyethylene,
Polypropylene,
Teflon,
Carbon Steel,
Stainless steel,

- Not to be used:

EPDM
Polystyrene,
Natural rubber,
Butyl rubber,

8. Exposure controls/personal protection.

Recommended engineering controls:

The use of local exhaust ventilation is recommended to control process emissions near the source.
Laboratory samples should be handled in a lab hood.
Provide mechanical ventilation of confined spaces.
Use explosion-proof ventilation equipment.
Arrange for eye wash possibility.

Occupational Threshold limit values (TLV):

Wynn's recommends 300 ppm total hydrocarbons based on composition.

Personal protection:

- Respiratory protection:

Ensure good ventilation.
In case of insufficient ventilation, use face mask with breathing filter, type: A (ABEK).

- Skin and hand protection:

Handle in accordance with good industrial hygiene and safety procedures.
Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction.
Use chemically protective boots when necessary to avoid contaminating shoes.
Appropriate protective clothing and gloves:

Nitrile,
polyvinylalcohol,

- Not to be used:

Neoprene,
polyvinylchloride (PVC),
Natural rubber,

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- Eye protection: Safety goggles.
Safety goggles/visor.

9. Physical and chemical properties (typical values).

. These are indicative values only. Please refer also to the product specification sheet.

Appearance: Clear.
Yellow.
Liquid.

Odour: Characteristic.

pH (concentrated product): Not applicable.

Boiling point: > 180 °C

Flash point (Abel/Pensky): ~ 80 °C

Auto-ignition temperature: > 200

Explosion limits: Lower: 0.6 (% vol)
Upper: 7 (% vol)

Vapour pressure at 20°C: > 0.15 hPa (mbar)

Density at 15°C (NF EN ISO 12185): 844 Kg/m³

Solubility in water: Negligible.

Oxidising properties: Not yet determined.

Partition coefficient (P o/w): Not yet determined.

refractive index at 20°C (ASTM D-1747): 1.4591

Viscosity at 40°C (ASTM 445): ~3.4 (mm²/s)

Viscosity at 100°C (ASTM 445): ~1.32 (mm²/s)

10. Stability and reactivity.

Stability: See Section 7 "Handling and Storage" for further details.
Stable in normal conditions of use.

Conditions to avoid: Avoid proximity or contact with hot surfaces, flames or sparks.
Store away from direct sunlight.

Materials to avoid: Avoid contact with strong oxidizers.
Avoid contact with strong acids and oxidizers.

Hazardous decomposition products: Smoke, carbon monoxide, aldehydes and other products of incomplete combustion.
Fumes, smoke, carbon dioxide (CO₂), carbon monoxide (CO) (Toxic).

11. Toxicological information.

. (Based on test with similar products).
(Refers to active component).
No toxicological information available.

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Oral LD50 (rat): >5000 (mg/kg)
Dermal LD50 (Rabbit): >2000 (mg/kg)
Inhalation LC50 (Rat/4h): >2000 (mg/m3)
Skin contact: Low order of toxicity
Irritating.
Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact: Will cause eye discomfort, but will not injure eye tissue.
Skin sensitization test: Data not available.

12. Ecological information.

Mobility: This substance is relatively volatile and will evaporate from water and soil over the course of a few days.
Degradability: Based upon data for a similar substance or estimated data.
This substance is expected to biodegrade rapidly.
This substance is expected to be removed in a wastewater treatment facility.
Ecotoxicity and bioaccumulation: Long term adverse effects to aquatic organisms are not expected.
WGK class (Germany): This substance is expected: 1

13. Disposal considerations..

Disposal of product: This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers.
Dispose of in a safe manner, in accordance with local regulations.
Prevent from entering sewers or the immediate environment.
Disposal of packaging: Dispose of in a safe manner, in accordance with local regulations.

14. Transport information.

--RID/ADR/RTMDR:
. Not classified under this legislation.
--MARITIME TRANSPORT (IMO-IMDG):
. Not classified under this legislation.
--AIR TRANSPORT (CAO/IATA):
. Not classified under this legislation.

15. Regulatory information.

EEC labelling information: The product is labelled in accordance with EC-Directive 88/379.
- Symbol(s): Harmful: Xn.
- Contains: Distillates (petroleum), hydrotreated light (CAS n°: 64742-47-8)

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- R Phrase(s):

R 65: Harmful, may cause lung damage if swallowed.

- S Phrase(s):

S (2): Keep out of reach of children.

S 23.2: Do not breathe vapour.

S 24: Avoid contact with skin.

S (62): If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

16. Other information.

Based on EC Directive 91/155/EEC.

Sources of key data used:

Raw material suppliers' data sheets were used as key data sources in the preparation of this safety data sheet.

Nature of revision:

Initial issue.

This index complete the technical data sheets but do not replace them.

The pieces of information included are based on the actual condition of our knowledge; they were given on good faith. It is not dispense by any case the utilization of knowledge and application to set the regulatory texts of their activities. It will take under its own responsibility the precautions linked to the utilization that it should produce. The object of the set of regulatory prescriptions is only to help the addressee to replace the obligations that concern him.

The addressee should make sure that the other obligations should not concern him, just those cited.

End of document.

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