



1. Chemical product and company identification

Product name ENDUREX 4000 PLUS
MSDS # 459658
Historic MSDS #: 25099-AM
Code 459658-US09
Manufacturer Castrol Industrial North America, Inc.
 150 W. Warrenville Road
 Naperville, IL 60563
Supplier Castrol Industrial North America, Inc.
 150 W. Warrenville Road
 Naperville, IL 60563
 Product Information: 1-800-621-2661
EMERGENCY SPILL INFORMATION: 1 (800) 424-9300 CHEMTREC (USA)

2. Composition/information on ingredients

This product does not contain any hazardous ingredients at or above regulated thresholds.

3. Hazards identification

Physical state Grease
Color Straw color.
Emergency overview CAUTION!
 MAY CAUSE EYE IRRITATION.
 MAY CAUSE SKIN IRRITATION.
 MAY CAUSE RESPIRATORY TRACT IRRITATION.
 Avoid contact with eyes, skin and clothing. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

Routes of entry Skin Contact. Eye contact. Inhalation. Ingestion.

Potential health effects

- Eyes** May cause eye irritation.
- Skin** May cause skin irritation.
- Inhalation** May cause respiratory tract irritation.
- Ingestion** Ingestion may cause gastrointestinal irritation and diarrhea.

Medical conditions aggravated by over-exposure Repeated or prolonged exposure is not known to aggravate medical condition.

See toxicological Information (section 11).

4. First aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops.
Skin contact	Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if irritation develops.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

5. Fire-fighting measures

Flammability of the product	May be combustible at high temperature.
Products of combustion	These products are carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide), nitrogen oxides (NO, NO ₂ etc.), halogenated compounds, hydrogen fluoride.
Unusual fire/explosion hazards	This material is not explosive as defined by established regulatory criteria.
Fire-fighting media and instructions	In case of fire, use water fog, foam, dry chemicals, or carbon dioxide.
Protective clothing (fire)	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

Personal precautions	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").
Environmental precautions and clean-up methods	If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.
Personal protection in case of a large spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

7. Handling and storage

Handling	Avoid contact with skin and clothing. Avoid contact with eyes. Use only with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

8. Exposure controls/personal protection

Occupational exposure limits

This product does not have any assigned OELs.

Control Measures	Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
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Product name ENDUREX 4000 PLUS	Product code 459658-US09	Page: 2/5
Version 2	Date of issue 10/02/2006.	Format US
	Build 4.2.8	Language ENGLISH. (ENGLISH)

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protection

Eyes

Avoid contact with eyes. Chemical splash goggles.

Skin and body

Avoid contact with skin and clothing. Wear suitable protective clothing.

Respiratory

Use only with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

Hands

Wear suitable gloves.

Not available.



Consult local authorities for acceptable exposure limits.

9. Physical and chemical properties

Physical state	Grease
Odor	Odorless.
Color	Straw color.
Heat of combustion	Not available.
Boiling point / Range	260 °C
Specific gravity	1.85 to 2.15
Density	2000 kg/m ³ (2 g/cm ³) at 23°C
Solubility	insoluble in water.
Viscosity	Kinematic: 85 mm ² /s (85 cSt) at 40°C Kinematic: 25 mm ² /s (25 cSt) at 100°C
Viscosity Index	300

10. Stability and reactivity

Stability and reactivity	The product is stable.
Conditions to avoid	Avoid excessive heat.
Incompatibility with various substances	Strong oxidizing materials
Hazardous decomposition products	These products are halogenated compounds, hydrogen fluoride.
Hazardous polymerization	Will not occur.

11. Toxicological information

Chronic toxicity

Carcinogenic effects

No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).

Mutagenic effects

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.

Product name ENDUREX 4000 PLUS

Product code 459658-US09

Page: 3/5

Version 2

Date of issue 10/02/2006.

Format US

Language ENGLISH.

Build 4.2.8

(ENGLISH)

Reproductive effects

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.

Teratogenic effects

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

12. Ecological information

Ecotoxicity

No testing has been performed by the manufacturer.

Persistence/degradability

Not determined.

13. Disposal considerations

Waste information

Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with all applicable local and national regulations.

RCRA Waste Code(s)

USED OIL

Remarks

No additional remark.

Consult your local or regional authorities.

14. Transport information

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO)

15. Regulatory information

U.S. Federal regulations

US INVENTORY (TSCA): In compliance.

TSCA 5(a)2 final significant new use rule (SNUR):: Sodium nitrite

TSCA 12(b) one-time export notification:: Polytetrafluoroethylene

TSCA 12(b) annual export notification: Sodium nitrite; Polytetrafluoroethylene

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: ENDUREX 4000 PLUS: Immediate (Acute) Health Hazard

SARA 313

Form R - Reporting requirements

This product does not contain any hazardous ingredients at or above regulated thresholds.

Supplier notification

This product does not contain any hazardous ingredients at or above regulated thresholds.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):: Sodium nitrite: 100 lbs. (45.36 kg);

State regulations

Massachusetts RTK:Sodium nitrite

New Jersey:Sodium nitrite

Pennsylvania RTK:Polytetrafluoroethylene (generic environmental hazard); Sodium nitrite (environmental hazard, generic environmental hazard)

WARNING: This product contains a chemical known to the State of California to cause cancer. Silica, crystalline - quartz; Tetrafluoroethylene, inhibited

Product name ENDUREX 4000 PLUS	Product code 459658-US09	Page: 4/5
Version 2	Date of issue 10/02/2006.	Format US
		Language ENGLISH.
	Build 4.2.8	(ENGLISH)

Inventories

AUSTRALIAN INVENTORY (AICS): In compliance.

CANADA INVENTORY (DSL): Not listed.

CHINA INVENTORY (IECS): In compliance.

EC INVENTORY (EINECS/ELINCS): Not listed.

JAPAN INVENTORY (ENCS): In compliance.

KOREA INVENTORY (ECL): In compliance.

PHILIPPINE INVENTORY (PICCS): In compliance.

16. Other information

Label requirements

CAUTION!

MAY CAUSE EYE IRRITATION.
MAY CAUSE SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

HMIS® Rating :

Health 1 -
Flammability 1
Physical Hazard 0
Personal protection B

National Fire Protection Association (U.S.A.)



Other special considerations

A NFPA health hazard rating of "3" is assigned due to toxicity of thermal decomposition products and fluorine (HF); otherwise, the material itself warrants a health hazard rating of "1".

History

Date of issue

10/02/2006.

Date of previous issue

04/26/2006.

Prepared by

Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

Product name ENDUREX 4000 PLUS

Product code 459658-US09

Page: 5/5

Version 2

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