

Safety Data Sheet
acc. to OSHA HCS

Printing date 10/27/2016

Reviewed on 10/27/2016

1 Identification

- **Product identifier**
- **Product Name: 5-ELEMENT OIL STANDARD**
- **Part Number:**
AM-5000Y
AM-5000Z
- **Application of the substance / the mixture** *Certified Reference Material*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SPEX CertiPrep, LLC.
203 Norcross Ave, Metuchen,
NJ 08840 USA
- **Information department:** *product safety department*
- **Emergency telephone number:**
Emergency Phone Number (24 hours)
CHEMTREC (800-424-9300)
Outside US: 703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture** *The product is not classified according to the Globally Harmonized System (GHS).*

- **Label elements**
- **GHS label elements** *Not Regulated*
- **Hazard pictograms** *Not Regulated*
- **Signal word** *Not Regulated*
- **Hazard statements** *Not Regulated*
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** *Mixture of the substances listed below with nonhazardous additions.*
- **Dangerous components:** *Not Regulated*

Chemical identification of the substance/preparation

64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic	97.5%
7440-70-2	Calcium from Calcium carbonate	0.5%
7439-95-4	magnesium	0.5%
7723-14-0	Phosphorus from Ammonium dihydrogenorthophosphate	0.5%
7440-66-6	zinc powder -zinc dust (stabilized)	0.5%
7440-39-3	Barium from Barium carbonate	0.5%

4 First-aid measures

- **Description of first aid measures**
- **General information:** *No special measures required.*
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 10/27/2016

Reviewed on 10/27/2016

Product Name: 5-ELEMENT OIL STANDARD

(Contd. of page 1)

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for Doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Follow good laboratory practices.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Immediately remove all soiled and contaminated clothing.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

(Contd. on page 3)

US

Product Name: 5-ELEMENT OIL STANDARD

(Contd. of page 2)

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
Odour Threshold:	Not applicable.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature:

Decomposition temperature: Not applicable.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower:	Not applicable.
Upper:	Not applicable.

· Vapor pressure: Not determined.

· Density: Not applicable.

· Relative density: Not applicable.

· Vapor density: Not applicable.

· Evaporation rate: Not applicable.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not applicable.

· Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.

· Solvent content:

Organic solvents: 0.0 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity: No further relevant information available.

· Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 10/27/2016

Reviewed on 10/27/2016

Product Name: 5-ELEMENT OIL STANDARD

(Contd. of page 3)

- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
Irritant
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|----------------------------------|---------------|
| · UN-Number | |
| · DOT, ADR, IMDG, IATA | Not Regulated |
| · UN proper shipping name | |
| · DOT, ADR, IMDG, IATA | Not Regulated |

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 10/27/2016

Reviewed on 10/27/2016

Product Name: 5-ELEMENT OIL STANDARD

(Contd. of page 4)

· Transport hazard class(es)	
· DOT, ADR, IMDG, IATA	
· Class	Not Regulated
· Packing group	
· DOT, ADR, IMDG, IATA	Not Regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	Not Regulated

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

- **Section 355 (extremely hazardous substances):**

7723-14-0	Phosphorus from Ammonium dihydrogenorthophosphate
-----------	---

- **Section 313 (Specific toxic chemical listings):**

7723-14-0	Phosphorus from Ammonium dihydrogenorthophosphate
-----------	---

7440-66-6	zinc powder -zinc dust (stabilized)
-----------	-------------------------------------

7440-39-3	Barium from Barium carbonate
-----------	------------------------------

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

7440-66-6	zinc powder -zinc dust (stabilized)	D, I, II
-----------	-------------------------------------	----------

7440-39-3	Barium from Barium carbonate	D, CBD(inh), NL(oral)
-----------	------------------------------	-----------------------

- **TLV (Threshold Limit Value established by ACGIH)**

7440-39-3	Barium from Barium carbonate	A4
-----------	------------------------------	----

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **Protective Action Criteria for Chemicals**

- **PAC-1:**

64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic	140 mg/m ³
------------	---	-----------------------

7439-95-4	magnesium	18 mg/m ³
-----------	-----------	----------------------

7723-14-0	Phosphorus from Ammonium dihydrogenorthophosphate	0,27 mg/m ³
-----------	---	------------------------

7440-66-6	zinc powder -zinc dust (stabilized)	6 mg/m ³
-----------	-------------------------------------	---------------------

7440-39-3	Barium from Barium carbonate	1,5 mg/m ³
-----------	------------------------------	-----------------------

- **PAC-2:**

64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic	1,500 mg/m ³
------------	---	-------------------------

7439-95-4	magnesium	200 mg/m ³
-----------	-----------	-----------------------

7723-14-0	Phosphorus from Ammonium dihydrogenorthophosphate	3 mg/m ³
-----------	---	---------------------

7440-66-6	zinc powder -zinc dust (stabilized)	21 mg/m ³
-----------	-------------------------------------	----------------------

7440-39-3	Barium from Barium carbonate	180 mg/m ³
-----------	------------------------------	-----------------------

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Printing date 10/27/2016

Reviewed on 10/27/2016

Product Name: 5-ELEMENT OIL STANDARD

(Contd. of page 5)

· PAC-3:		
64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic	8,900 mg/m ³
7439-95-4	magnesium	1,200 mg/m ³
7723-14-0	Phosphorus from Ammonium dihydrogenorthophosphate	18 mg/m ³
7440-66-6	zinc powder -zinc dust (stabilized)	120 mg/m ³
7440-39-3	Barium from Barium carbonate	1,100 mg/m ³

- **GHS label elements** Not Regulated
- **Hazard pictograms** Not Regulated
- **Signal word** Not Regulated
- **Hazard statements** Not Regulated
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** product safety department

- **Contact:**

SPEX CertiPrep, LLC.
1-732-549-7144

- **Date of preparation / last revision** 10/27/2016 / -

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit