# 1. IDENTIFICATION

## 1.1. Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Royal Crown Tech Plus 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>820</td>
</tr>
</tbody>
</table>

**Synonyms**

None

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

- **Recommended use**: Lubricant
- **Uses advised against**: No information available

## 1.3. Details of the supplier of the safety data sheet

**Manufacturer**

AXEL Royal, LLC  
516 S. 25th West Ave  
Tulsa, OK 74127  
United States  
918 584 2671

**1.4. Emergency telephone number**

- **ChemTel Emergency telephone**: 1-800-255-3924
- **International Emergency telephone**: +01-813-248-0585

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# 2. HAZARDS IDENTIFICATION

## 2.1. Classification of the substance or mixture

**Aspiration toxicity**

Category 1

## 2.2. Label elements

- **Signal word**: DANGER
- **Hazard statements**: May be fatal if swallowed and enters airways.
- **Symbols/Pictograms**: [Image]

**IF SWALLOWED**: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

**Precautionary Statements - Storage**

Store locked up.

Dispose of contents/container to an approved waste disposal plant.

## 2.3. Hazards not otherwise classified (HNOC)

Not applicable.

## 2.4. Other information
Not applicable.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White mineral oil, petroleum</td>
<td>8042-47-5</td>
<td>60-100</td>
</tr>
</tbody>
</table>

The exact percentage (concentration) of composition has been withheld as a trade secret.

**Ingredient comments**

The mineral oils in the product contain <3% DMSO-extract (IP 346).

### 4. FIRST AID MEASURES

#### 4.1. Description of first aid measures

**Inhalation**
Move to fresh air in case of accidental inhalation of vapors or decomposition products.

**Skin contact**
Wash skin with soap and water.

**Eye contact**
Rinse thoroughly with plenty of water, also under the eyelids.

**Ingestion**
Do not induce vomiting without medical advice. **IF SWALLOWED:** Call a POISON CENTER or doctor if you feel unwell.

#### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms**
None known.

#### 4.3. Indication of any immediate medical attention and special treatment needed

**Note to physicians**
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### 5.1. Extinguishing media

**Suitable extinguishing media**
Use CO2, dry chemical, or foam.

**Unsuitable extinguishing media**
Do not use a solid water stream as it may scatter and spread fire.

#### 5.2. Special hazards arising from the substance or mixture

Not flammable. Fire may produce irritating and/or toxic gases.

**Hazardous combustion products**
Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

#### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

8.2. Exposure controls

Engineering controls

Eyewash stations
Ventilation systems

8.3. Individual protection measures, such as personal protective equipment

Hand protection

Wear protective nitrile rubber gloves Thickness ≥ 0.38 mm - breakthrough time >480
Eye/face Protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
No special technical protective measures are necessary.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Smooth</td>
<td>Have no information available</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td>Have no information available</td>
</tr>
<tr>
<td>Color</td>
<td>light yellow</td>
<td>Have no information available</td>
</tr>
<tr>
<td>Odor</td>
<td>Petroleum</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 93.5 °C / &gt; 200.3 °F</td>
<td>ASTM D92</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability limits in air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>0.8600</td>
<td>No information available insoluble</td>
</tr>
<tr>
<td>Water solubility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n-octanol/water)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>15.00 mm²/s</td>
<td>@ 40 °C No information available</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

10.1. Reactivity
Stable.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
None under normal processing.

10.4. Conditions to avoid
Heat.

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
None under normal processing.

11. TOXICOLOGICAL INFORMATION

11.1. Information on likely routes of exposure

Inhalation  Inhalation of oil mist may cause irritation, headaches, nausea and breathing difficulties.

Ingestion  May be harmful if swallowed.

Skin contact  May be harmful in contact with skin.

Eye contact  May cause slight irritation.

11.2. Information on toxicological effects

Symptoms  No information available.

11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation  Not hazardous based on component data.

Serious eye damage/eye irritation  Not hazardous based on component data.

Sensitization  Not hazardous based on component data.

Germ cell mutagenicity  Not hazardous based on component data.

Carcinogenicity  Not hazardous based on component data.

Reproductive toxicity  Not hazardous based on component data.

STOT-single exposure  Not hazardous based on component data.

STOT-repeated exposure  Not hazardous based on component data.

Aspiration hazard  May be fatal if swallowed and enters airways.

11.4. Numerical measures of toxicity

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>LC50 (lethal concentration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White mineral oil, petroleum</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8042-47-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following values are calculated based on chapter 3.1 of the GHS document.
12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity
Not regarded as dangerous for the environment. Occasional major emissions or frequently recurring minor emissions may have a harmful or disturbing effect.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>White mineral oil, petroleum</td>
<td>-</td>
<td>10000: 96 h Lepomis macrochirus mg/L LC50</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8042-47-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
Not readily biodegradable.

12.3. Bioaccumulative potential
Material does not bioaccumulate.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>White mineral oil, petroleum</td>
<td>6</td>
</tr>
<tr>
<td>8042-47-5</td>
<td></td>
</tr>
</tbody>
</table>

12.4. Mobility in soil
After release, adsorbs onto soil.

12.5. Results of PBT and vPvB assessment
No information available

12.6. Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal of wastes
Dispose of in accordance with federal, state and local regulations. Use personal protection recommended in Section 8.

Contaminated packaging
Dispose of in accordance with federal, state and local regulations

US EPA waste number
No information available

Other information
Waste codes should be assigned by the user based on the application for which the product was used

14. TRANSPORT INFORMATION

14.1. UN number
Not regulated

14.2. UN proper shipping name
Not regulated

14.3. Transport hazard class(es)
Not regulated

14.4. Packing group
Not applicable

14.5. Environmental hazards
None

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available

14.7. Special precautions for user
None

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

CWA (Clean Water Act)  This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

International Inventories

TSCA  Complies
DSL/NDSL  Complies
EINECS/ELINCS  Complies
ENCS  Complies
IECSC  Complies
KECL  Complies
PICCS  Complies
AICS  Complies
NZIoC  Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313  Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65  This product does not contain any Proposition 65 chemicals.
U.S. State Right-to-Know Regulations

US State Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number  Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

Revision date  11-Sep-2019

Revision note  SDS sections updated, 3, 11, 12, 15

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Material Safety Data Sheet