



SECTION 1: Product Identification

Chemical Name:	Ruthenium, 5% on activated carbon, (50-70% wetted powder) Evonik Noblyst [®] F3060
Product Number:	401
CAS Registry Number:	7440-18-8
Formula:	Ru
EINECS Number:	231-127-1
Chemical Family:	supported metal catalyst
Synonym:	Ruthenium on carbon catalyst, Ruthenium on charcoal, Evonik H 198 P/W 5% Ru

SECTION 2: Composition and Information on Ingredients

Ingredient	CAS Number	Percent	ACGIH (TWA)	OSHA (PEL)
Title compound	7440-18-8	5.0	no data	no data
Carbon	7440-44-0	65.0	3.5mg/m ³ (as C)	3.5mg/m ³ (as C)
Water	7732-18-5	balala		

SECTION 3: Hazards Identification

Emergency Overview:	May be irritating to skin, eyes and respiratory tract.
Primary Routes of Exposure:	Inhalation, skin, eyes
Eye Contact:	May cause slight to mild irritation of the skin.
Skin Contact:	May cause slight to mild irritation of the eyes.
Inhalation:	May be irritating to the nose, mucous membranes and respiratory tract.
Ingestion:	No information available on the physiological effects of ingestion. May be harmful if swallowed.
Acute Health Effects:	May be irritating to skin, eyes and respiratory tract.
Chronic Health Effects:	No information on long-term chronic effects.
NTP:	No



IARC:	No
OSHA:	No
SECTION 4: First Aid Measures	
Eye Exposure:	Immediately flush the eyes with copious amounts of water for at least 10-15 minutes. A victim may need assistance in keeping their eye lids open. Get immediate medical attention.
Skin Exposure:	Wash the affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.
Inhalation:	Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.
Ingestion:	Seek medical attention immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.
SECTION 5: Fire Fighting Measures	
Flash Point:	no data
Autoignition Temperature:	no data
Explosion Limits:	no data
Extinguishing Medium:	carbon dioxide, dry powder or foam
Special Fire Fighting Procedures:	If this product is involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.
Hazardous Combustion and Decomposition Products:	If involved in a fire, this material may emit toxic carbon monoxide.
Unusual Fire or Explosion Hazards:	Once dry, becomes a flammable solid and organic vapors may cause a vigorous reaction with possible fire or explosion.
SECTION 6: Accidental Release Measures	
Spill and Leak Procedures:	Keep moist. Small spills can be mixed with vermiculite or sodium carbonate and swept up.



SECTION 7: Handling and Storage

Handling and Storage: Keep container tightly closed. Keep moist. Becomes flammable when dry.

SECTION 8: Exposure Controls and Personal Protection

Eye Protection: Always wear approved safety glasses when handling a chemical substance in the laboratory.

Skin Protection: Wear protective clothing and gloves.

Ventilation: Handle the material in an efficient fume hood.

Respirator: If ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 1910.134.

Additional Protection: No additional protection required.

SECTION 9: Physical and Chemical Properties

Color and Form: wetted, black powder

Molecular Weight: not applicable

Melting Point: no data

Boiling Point: no data

Vapor Pressure: no data

Specific Gravity: no data

Odor: none

Solubility in Water: insoluble

SECTION 10: Stability and Reactivity

Stability: air and moisture stable

Hazardous Polymerization: no hazardous polymerization

Conditions to Avoid: If dried, contact with alcohols may cause fire.

Incompatibility: strong oxidizing agents and alcohols

Decomposition: none



Products:	
SECTION 11: Toxicological Information	
RTECS Data:	Title compound: No information available in the RTECS files. Carbon: Oral(rat); LD: >5g/kg.
Carcinogenic Effects:	no data
Mutagenic Effects:	no data
Tetratogenic Effects:	no data
SECTION 12: Ecological Information	
Ecological information:	No information available
SECTION 13: Disposal Considerations	
Disposal:	Dispose of according to local, state and federal regulations.
SECTION 14: Transportation	
Shipping Name (CFR):	Non-hazardous
Hazard Class (CFR):	NA
Additional Hazard Class (CFR):	NA
Packaging Group (CFR):	NA
UN ID Number (CFR):	NA
Shipping Name (IATA):	Non-hazardous
Hazard Class (IATA):	NA
Additional Hazard Class (IATA):	NA
Packaging Group (IATA):	NA
UN ID Number	NA



(IATA):

SECTION 15: Regulatory Information

TSCA: Listed in the TSCA inventory

SARA (Title 313): Title compound not listed

Second Ingredient: C: Listed in the TSCA inventory

Third Ingredient: H2O: Listed in the TSCA inventory