MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: YTTRIUM (III) NITRATE (Hexahydrate) 99.9% AR
CAS#: 13494-98-9
C.I. No.: Not available.
Synonym: Not available.
Chemical Name: YTTRIUM (III) NITRATE (Hexahydrate) 99.9% AR
Chemical Formula: N3O9Y · 6H2O

Composition and Information on Ingredients

Name	S.K.U	% by Weight
Yttrium trinitrate hexahydrate	GCS-4427	<=100%

Hazards Identification

Classification of the substance or mixture

Classification of the substance according to Regulation (EC) No 1272/2008:
Oxidizing solids (Category 2), H272
Skin irritation (Category 2), H315
Eye irritation (Category 2), H319
Specific target organ toxicity -single exposure (Category 3), Respiratory system, H335

Other hazards : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Contact with water liberates toxic gas.

First Aid Measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Indication of any immediate medical attention and special treatment needed

No data available

Fire and Explosion Data

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Special hazards arising from the substance or mixture Nitrogen oxides (NOx), Yttrium oxides

Advice for firefighters

Wear self contained breathing apparatus for fire-fighting if necessary.

Further information

Use water spray to cool unopened containers.

Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. \'20 Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Hygroscopic.

Storage class (TRGS 510): Oxidizing hazardous materials

Exposure Controls/Personal Protection

Control parameters

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection: Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Do not let product enter drains.

Physical and Chemical Properties

Information on basic physical and chemical properties

a)Appearance Form	: Crystals with lumps
b) Odour	: No data available.
c) Odour threshold	: No data available.
d) pH	: No data available.
e) Melting point/range	: No data available.
f) Initial boiling point andboiling range	: No data available.
g) Autoignition temperature	: No data available.
h) Flammability (solid, gas)	: No data available.
i) Upper/lower flammability or explosive limits	
j) : No data available.	
k) Flash point [°C]	: No data available.
Evaporation rate	: No data available.
Vapour pressure	: No data available.
k) Vapour density	: No data available.
l) Relative density,	: 2.682 g/mL at 25 °C

Solubility in water	: No data available.
Viscosity	: No data available.
Explosive properties	: No data available.
Oxidising properties is classified as oxidizing with the category 2.	: The substance or mixture
Decomposition temperature	: No data available.
Autoignition temperature	: No data available.
Molecular Weight	: No data available.

Stability and Reactivity Data

Reactivity : No data available.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : No data available.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents, strong bases.

Hazardous decomposition products

Other decomposition products - Hazardous decomposition products formed under fire conditions.- Nitrogen oxides (NOx), Yttrium oxides
Other decomposition products-No data available.

Toxicological Information

Information on toxicological effects

No data available (Yttrium trinitrate hexahydrate)

Skin corrosion/irritation

No data available (Yttrium trinitrate hexahydrate)

Serious eye damage/eye irritation

No data available (Yttrium trinitrate hexahydrate)

Respiratory or skin sensitization

No data available (Yttrium trinitrate hexahydrate)

Germ cell mutagenicity

No data available (Yttrium trinitrate hexahydrate)

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available (Yttrium trinitrate hexahydrate) Specific target organ toxicity - single exposure No data available (Yttrium trinitrate hexahydrate) Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available Additional Information RTECS: ZG3750000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Yttrium trinitrate hexahydrate)

Ecological Information

Toxicity: No data available.

Persistence - degradability : No data available.

Bioaccumulative potential : Not established.

Mobility in soil : No data available (Yttrium trinitrate hexahydrate)

Results of PBT and vPvB assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects :

No data available.

Disposal Considerations

Waste treatment methods

Product: Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

Transformation Information

Land transport (ADR-RID)

Proper shipping name : NITRATES, INORGANIC, N.O.S.
UN N° 1477
ADR - Class : 5.1

Sea transport (IMDG) [English only]

Proper shipping name : NITRATES, INORGANIC, N.O.S.
UN N° 1477
IMO-IMDG - Class or division : 5.1
IMO-IMDG - Packing group II

Air transport (ICAO-IATA) [English only]

Proper shipping name : Nitrates, inorganic, n.o.s. UN N° 1477
IATA - Class or division : 5.1
IATA - Packing group II

Other Regulatory Information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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