



SAFETY DATA SHEET
(According to CE Regulation n°1907/2006 REACH)

YAG

1- IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Product name: YAG
Chemical formula : $(Y_{(1-x-y)}+Gd_x+Ce_y)_3Al_5O_{12}$
Numéro d'enregistrement REACH Not Applicable
CAS number : 12005-21-9
EINECS number : 234-465-8
Application(s) : Phosphor synthesis
Manufacturer name : BAIKOWSKI
Address : B.P. 501
74339 LA BALME DE SILLINGY CEDEX
FRANCE
Phone : +33 (0)4.50.22.69.02
Fax: +33 (0)4.50.22.28.92
E-mail : sds@baikowskichimie.com
Supplier name : BAIKOWSKI
Emergency call numbers : France : ORFILA : +33 (0)1 45 42 59 59
Other countries : cf. section 16

2- DESCRIPTION

- Classification/Specific hazards : Not hazardous product according to CE criteria.
- Health effects : May cause irritation of respiratory tract.
- Physical and chemical hazards : No fire or explosion hazard.
- Eco hazards : Not biodegradable.

3- COMPOSITION

Chemical name	EINECS N°	CAS N°	REACH Registration N °	Concentration
Yttrium Oxide	215-233-5	1314-36-9	-	45 to 60 %
Aluminum Oxide	215-691-6	1344-28-1	01-2119529248-35-0009	35 to 40 %
Other	Gd + Ce			0 to 15 %

- Hazardous impurities : none
- Hazardous compounds : none

4- FIRST AID MEASURES

- Inhalation : Move affected person to fresh air.
Obtain medical advice.
- Skin contact : Flush with water.
- Eye contact : Flush with water IMMEDIATELY (at least 15 minutes) holding the eyelids open.
If irritation persists, obtain medical advice.
- Ingestion : Flush the mouth with water.
Obtain medical advice.



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5- FIRE FIGHTING MEASURES

- Extinguishing measures :
 - Appropriate: All the fire extinguishing agents are usable
 - Not recommended : None. In case of fire, use the closest extinguishing agents available.

- Specific hazards : No particular risk in case of fire.

6- ACCIDENTAL RELEASE MEASURES

- Individual precautions :
 - Do not breathe the powder. Use anti-dust mask.
 - Avoid eye contact. Use safety goggles with lateral protection.

- Environmental precautions : Prevent from discharging the product in sewage.
- Clean-up : Vacuum and/or sweep up.
- Disposal : Pack, label and dispose of in respect of the local regulations.

7- HANDLING AND STORAGE

HANDLING :

- Technical measures : Pulverulent product: use dust-tight containers.
- Precautions to be taken : Prevent dust accumulation.
Wear appropriate safety equipments (cf chapter 8).
If insufficient ventilation, wear appropriate respiratory equipment.

STORAGE

- Technical measures : Use dust-tight containers.
- Storage conditions
 - Recommended : To protect the product quality and properties, keep away from moisture and bad weather.
- Packing conditions : Use standard packing.
- Packing materials :
 - Recommended : Plastic bag.

8- EXPOSURE CONTROL/PERSONAL PROTECTION

- Technical measures : No particular or specific measure required, provided industrial safety and hygiene regulations requirements are met.
- Limit values :
 - Limit values (France) : Total dust - VME : 10 mg/m³.
 - Limit values (USA / ACGIH) : Total dust - TLV (TWA) : 10 mg/m³.
- Individual protections :
 - Respiratory protection :



Anti-dust mask ; filtering facepiece



Appropriate gloves, resisting to chemical substances

- Hands protection :



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- Eyes protection :



Safety goggles with lateral protections.

- Skin protection :



Professional clothes.

9- PHYSICAL AND CHEMICAL PROPERTIES*ASPECT*

- Physical state : Pulverulent solid (powder).
- Colour : White to yellow.
- Odor : None.
- Typical temperatures :
 - Fusion > 2000°C
- Caractéristiques d'inflammabilité
 - Flammability – Flash point : None
- Combustive properties : Unknown
- Solubility
 - In water : Almost insoluble.
 - In organic compounds : Unknown.

10- STABILITY AND REACTIVITY

- Stability : Stable at high temperature.
Hygroscopic product.
- Hazardous reactions :
 - Conditions to be prevented : No hazardous reaction known under normal use conditions.
 - Materials to avoid : Strong acids. Strong bases.

11- TOXICOLOGICAL INFORMATION

- Local effects : May cause respiratory tract irritation.
May cause eye and skin light irritation.

12- ENVIRONMENTAL INFORMATION

- Mobility : Non biodegradable.
- Degradation : None : inert mineral product.
- Bioaccumulation : None.
- Target compartment : Ultimate target compartment : SOIL and SEDIMENTS.
- Ecotoxicity : Toxic for aquatic organisms.

13- DISPOSAL CONSIDERATIONS*PRODUCT RESIDUE :*

The wastes are not considered as hazardous materials according to decree n°2002-540 of April 18th 2002 regarding hazardous materials classification.

- Disposal : Dispose in respect of the local regulations.

USED PACKING :

- Decontamination / clean-up : Empty before recycling.

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▪ Destruction / disposal : Wash before reuse or recycling.

14- FREIGHT INFORMATION

- International regulations :
- Train / road (RID / ADR): None.
 - Ship (OMI / IMDG) : None.
 - Airplane (OACI / IATA) : None.
- Other regulations :
- France : Train / road (RTMD) : None.

REMARK : The regulatory prescriptions above are the ones in operation on the day of the sheet update.

15- SAFETY INFORMATION**LABELLING:**

- CE Regulations : Mandatory labelling of hazardous materials (auto-classification) : NOT applicable.

NOTE : The regulatory information in this section only recalls the main prescriptions specifically applicable to the MSDS of the related product.

Pay attention to the possible other existing regulations that come in addition to these prescriptions.
It is recommended to consult any local, national or international measures or considerations that should be applied..

16- OTHER INFORMATION

The modifications are pointed out with a bold vertical line on the text left margin.

YAG is still at development stage. The proposed classification was established by analogy with the ones valid for each substance in this compound. This classification can be changed if necessary, as soon as new data are available. This sheet is given in addition to the technical data sheets. The information contained herein is given in good faith, according to our up-to-date knowledge. The use of this product for unusual applications may possibly present a risk. The user must know and apply the regulation of his own activity and is responsible for the good use of this product in respect to the statutory information given in the sheet.

Emergency phone numbers :

Trans-European – Nafleet International	+32-(0)3-575-5555
Czech Republic	+420-602-669421
France / Suisse romande	+33-(0)6-11-07-32-81
Germany / Austria / German Switzerland	+49-(0)6232-130128
Hungary	+36-30-9-506-447
Italy / Italian Switzerland	+39-333-210-7947
The Netherlands	+32-(0)3-575-0330
Poland	+48-(0)601-66-2626 (SGS) / +48 (0) 14 637 40 81 (SPOT)
United Kingdom and Ireland	+44-(0)7071-223-738
USA Chemtrec International	+1-703-527-3887