

Printing date 09/14/2022

Version number 6

Reviewed on 05/11/2022

1 Identification

- · Product identifier
 - · Product number WUM3A417
 - · Trade name: S/S WB UV ARTIC WHITE 5 GL
 - · Application of the substance / the mixture For professional use
- · Details of the supplier of the safety data sheet
 - · Manufacturer/Supplier:

IVM Chemicals Srl

Viale della Stazione 3 -27020 Parona (PV)Italy -Tel +39 038425441

· Information department:

Environmental Health and safety office

hseoffice@ivmchemicals.com

· Emergency telephone number:

ChemTel Expert Assistance Hotline/SDS Fax Access by dialing 1-800-255-3924 or for International +1-813-248-0585.

2 Hazard(s) identification

· Classification of the substance or mixture

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

- · Label elements
 - · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



- · Hazard-determining components of labeling:

2 propenoic acid, reaction products with dipentaerythritol 2-methyl-2H-isothiazol-3-one

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

· Hazard statements

· Signal word Warning

H317 May cause an allergic skin reaction.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see on this label).
P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 0 Fire = 1 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0 Fire = 1 Reactivity = 0



Printing date 09/14/2022

Version number 6

Reviewed on 05/11/2022

Product number WUM3A417

Trade name: S/S WB UV ARTIC WHITE 5 GL

(Contd. of page 1)

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture: consisting of the following components.

· Dangerous o	•	
100-79-8	2,2-dimethyl-1,3-dioxolan-4-ylmethanol © Eye Irritation 2A, H319	5-9.99%
1384855-91-7	2 propenoic acid, reaction products with dipentaerythritol Skin Irrititation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1A, H317 Aquatic Acute 3, H402; Aquatic Chronic 3, H412	1-2.49%
34590-94-8	(2-methoxymethylethoxy)propanol Flammable Liquids 4, H227	<1%
112-34-5	2-(2-butoxyethoxy)ethanol © Eye Irritation 2A, H319	<0.5%
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide Sensitization - Skin 1A, H317 Aquatic Chronic 4, H413	≥0.1-<0.5%
68439-49-6	c16-18 alcohols ethoxylated Acute Toxicity - Oral 3, H301 Eye Damage 1, H318	<0.5%
2682-20-4	2-methyl-2H-isothiazol-3-one Acute Toxicity - Oral 3, H301; Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 3, H331 Skin Corrosion 1B, H314; Eye Damage 1, H318 Sensitization - Skin 1, H317	≥0.0015-<0.01%
55965-84-9	a mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1) Acute Toxicity - Oral 3, H301; Acute Toxicity - Dermal 2, H310; Acute Toxicity - Inhalation 2, H330 Skin Corrosion 1B, H314; Eye Damage 1, H318 Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100) Sensitization - Skin 1A, H317	≥0.00025-<0.0015%

4 First-aid measures

· Description of first aid measures

· General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

personal protective equipment for first aid responders is recommended. (please see section 8)

· 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.

- · 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: Do not induce vomiting; immediately call for medical help.
- · Information for doctor:
 - · Most important symptoms and effects, both acute and delayed Allergic reactions

(Contd. on page 3)



Printing date 09/14/2022

Version number 6

Reviewed on 05/11/2022

Product number WUM3A417

Trade name: S/S WB UV ARTIC WHITE 5 GL

(Contd. of page 2)

For symptoms and effects caused by substances, refer to Section 11.

· 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.

· For safety reasons unsuitable extinguishing agents:

Do not use a jet water stream as it may scatter and spread fire.

· Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Carbon monoxide (CO)

Advice for firefighters

Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.

· Protective equipment:

Hardhat with visor, fireproof clothing, suitable gloves and if necessary respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

Environmental precautions:

Dilute with plenty of water.

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).

Dispose contaminated material as waste according to Section 13.

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.

· Protective Action Criteria for Chemicals

de C.I. 77891 Pigment white 6	30 mg/m³
,3-dioxolan-4-ylmethanol	3.9 ppm
, chemically prepared	18 mg/m³
diol, propoxylated	30 mg/m ³
ethylethoxy)propanol	150 ppm
noxy)ethanol	30 ppm
ls ethoxylated	3.8 mg/m³
	3.7 ppm
ls ethoxylated	3.8 mg/m³
	ide C.I. 77891 Pigment white 6 1,3-dioxolan-4-ylmethanol 2, chemically prepared 2diol, propoxylated 2ethylethoxy)propanol 2hoxy)ethanol 20ls ethoxylated 2inoethanol 20ls ethoxylated

Contd. on page 4



Printing date 09/14/2022

Version number 6

Reviewed on 05/11/2022

Product number WUM3A417

Trade name: S/S WB UV ARTIC WHITE 5 GL

		(Contd. of page
· PAC-2:		
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	330 mg/m ³
100-79-8	2,2-dimethyl-1,3-dioxolan-4-ylmethanol	43 ppm
7631-86-9	silicon dioxide, chemically prepared	740 mg/m ³
25322-69-4	Propane-1,2-diol, propoxylated	330 mg/m ³
34590-94-8	(2-methoxymethylethoxy)propanol	1700* ppm
112-34-5	2-(2-butoxyethoxy)ethanol	33 ppm
68439-49-6	c16-18 alcohols ethoxylated	42 mg/m³
108-01-0	2-dimethylaminoethanol	40 ppm
68439-49-6	6 c16-18 alcohols ethoxylated	
· PAC-3:		
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	2,000 mg/m ³
100-79-8	2,2-dimethyl-1,3-dioxolan-4-ylmethanol	260 ppm
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m ³
25322-69-4	Propane-1,2-diol, propoxylated	2,000 mg/m ³
34590-94-8	(2-methoxymethylethoxy)propanol	9900** ppm
112-34-5	2-(2-butoxyethoxy)ethanol	200 ppm
68439-49-6	c16-18 alcohols ethoxylated	250 mg/m³
108-01-0	2-dimethylaminoethanol	72 ppm
68439-49-6	c16-18 alcohols ethoxylated	250 mg/m³

7 Handling and storage

- · Handling:
 - · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · 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:

Observe the label precautions, the expiration date for the use, if not indicated, is from delivery date of goods.

In cases where there is no reported expiration date, it means that the product must be used within 8 months.

Take on temperature greater than 5 ° C

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) Those typical of the product and the instructions in the data sheet if required.

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 following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

(Contd. on page 5)



Printing date 09/14/2022 Version number 6 Reviewed on 05/11/2022

Product number WUM3A417

Trade name: S/S WB UV ARTIC WHITE 5 GL

(Contd. of page 4)

At this time, the other constituents have no known exposure limits.

34590-94-8 (2-methoxymethylethoxy)propanol

PEL Long-term value: 600 mg/m³, 100 ppm

Skin

REL Short-term value: 900 mg/m³, 150 ppm

Long-term value: 600 mg/m³, 100 ppm

Skin

TLV Long-term value: NIC-50 ppm

(Skin)

112-34-5 2-(2-butoxyethoxy)ethanol

TLV Long-term value: 10* ppm
*Inhalable fraction and vapor

· 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.
 Wash hands before breaks and at the end of work.
 - · Breathing equipment: Short term filter device:



Suitable respiratory protective device recommended.

Filter A

· Protection of hands:



Protective gloves

Due to missing tests no recommendation to the glove material can be given for the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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

· 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: Fluid

(Contd. on page 6)



Printing date 09/14/2022 Version number 6 Reviewed on 05/11/2022

Product number WUM3A417

Trade name: S/S WB UV ARTIC WHITE 5 GL

	(Cor	ntd. of page
· Color:	According to product specification	
· Odor:	Characteristic	
· Odor threshold:	Not determined.	
· pH-value:	Mixture is non-polar/aprotic. Range: 7 - 9	
· Change in condition		
· Melting point/Melting range:	Undetermined.	
· Boiling point/Boiling range:	100 °C (212 °F)	
· Flash point:	100 °C (212 °F)	
· Flammability (solid, gaseous):	Not applicable.	
\cdot Ignition temperature:	>370 °C (>698 °F)	
\cdot Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
· Lower:	Not determined.	
· Upper:	Not determined.	
· Vapor pressure at 20 °C (68 °F):	0.1 hPa	
· Density (+/- 0,03) at 20 °C (68 °F):	1.178 g/cm³ (9.83 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
· Water:	Fully miscible.	
· Partition coefficient (n-octanol/water)	: Not determined.	
· Viscosity:		
· Dynamic:	Not determined.	
· Kinematic at 20 °C (68 °F):	60 s (ISO 6 mm)	
· Oxidising properties:	N.A.	
· Solvent content:	40.0.07	
· Water:	49.8 %	
· VOC content:	6.65 % 8.8 g/l / 0.07 lb/gal	
· Solids content:	43.4 %	
Other information (HAPS) 112-34-5 2-(2-butoxyethoxy)ethanol		<0.59
121-44-8 triethylamine		<0.19
· Other information	No further relevant information available.	CO. 17

10 Stability and reactivity

- · Reactivity typical of the product as indicated in the data sheet
- · Chemical stability The product is stable in normal conditions of storage and use recommended (Contd. on page 7)



Printing date 09/14/2022

Version number 6

Reviewed on 05/11/2022

Product number WUM3A417

Trade name: S/S WB UV ARTIC WHITE 5 GL

(Contd. of page 6)

- · Thermal decomposition / conditions to be avoided:
 No decomposition if used and stored according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: Acids, alkalis and oxidizing agents
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:

	LC50 value	es that are relevant for classification:	
	ATE (Acute Toxicity Estimate)		
Oral	LD50	99,127 mg/kg	
100-79-8	2,2-dimeth	nyl-1,3-dioxolan-4-ylmethanol	
Oral	LD50	7,000 mg/kg (mouse)	
Inhalative	LC50	1,001 mg/l (daphnia) (24 h)	
		16,700 mg/l (Fish) (96 h)	
1384855-9	91-7 2 pro	penoic acid, reaction products with dipentaerythritol	
Oral	LD50	2,001 mg/kg (mouse)	
Dermal	LD50	2,001 mg/kg (rabbit)	
34590-94-	8 (2-meth	oxymethylethoxy)propanol	
Oral	LD50	5,135 mg/kg (mouse)	
Dermal	LD50	19,020 mg/kg (rabbit)	
112-34-5	2-(2-butox	yethoxy)ethanol	
Oral	LD50	6,600 mg/kg (mouse)	
Dermal	LD50	2,764 mg/kg (rabbit)	
162881-26	6-7 pheny	bis(2,4,6-trimethylbenzoyl)-phosphine oxide	
Oral	LD50	2,001 mg/kg (mouse)	
Dermal	LD50	2,001 mg/kg (mouse)	
108-01-0	2-dimethy	laminoethanol	
Oral	LD50	1,183 mg/kg (mouse)	
Dermal	LD50	1,219 mg/kg (rabbit)	
Inhalative	LC50/4 h	6.1 mg/l (mouse)	
2682-20-4	2-methyl	-2H-isothiazol-3-one	
Oral	LD50	200 mg/kg (mouse)	
Dermal	LD50	400 mg/kg (mouse)	
Inhalative	LC50/4 h	0.53 mg/l (mouse)	

- · Primary irritant effect:
 - · on the skin: No irritant effect.
 - on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

Irritant

May cause an allergic skin reaction.

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

(Contd. on page 8)



Printing date 09/14/2022 Version number 6 Reviewed on 05/11/2022

Product number WUM3A417

Trade name: S/S WB UV ARTIC WHITE 5 GL

(Contd. of page 7)

· Carcinogenic categories

Titanium dioxide

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

· IARC (International Agency for Research on Cancer - Cl. 1 and 2)

13463-67-7 Titanium dioxide C.I. 77891 Pigment white 6

2B - DUST

· 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:			
1384855-91	1384855-91-7 2 propenoic acid, reaction products with dipentaerythritol			
EC50	101 mg/l (algae) (72 h)			
	35 mg/l (daphnia) (48 h)			
LC50 (96h)	13 mg/l (Fish)			
34590-94-8	34590-94-8 (2-methoxymethylethoxy)propanol			
EC50	970 mg/l (algae) (72 h)			
	1,919 mg/l (daphnia) (48 h)			
LC50 (96h)	1,001 mg/l (Fish)			
112-34-5 2-	112-34-5 2-(2-butoxyethoxy)ethanol			
EC50	1,001 mg/l (daphnia) (48 h)			
LC50 (96h)	1,300 mg/l (Leuciscus idus melanotus)			
162881-26-7 phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide				
EC50	1,175 mg/l (daphnia)			
	48h			
108-01-0 2-	dimethylaminoethanol			
EC50	66.1 mg/l (algae) (72 h)			
	98.4 mg/l (daphnia) (48 h)			
	55965-84-9 a mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1)			
EC50	0.027 mg/l (algae) (72 h)			
	0.16 mg/l (daphnia) (48 h)			
LC50 (96h)	0.19 mg/l (Fish)			
Parcistance	and degradability. 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.
- · Additional ecological information:
 - · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

(Contd. on page 9)



Printing date 09/14/2022 Version number 6 Reviewed on 05/11/2022

Product number WUM3A417

Trade name: S/S WB UV ARTIC WHITE 5 GL

(Contd. of page 8)

Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

· Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
 - · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to hazardous waste disposers.

Dispose of contents and container in accordance with local state and federal regulations.

- · Uncleaned packagings:
 - · Recommendation: Disposal must be made according to official regulations.
 - · Recommended cleansing agent: Water, if necessary with cleansing agents.

Transport information	
UN-Number	
· DOT, ADN, IMDG, IATA	Not applicable
· Note	Check viscosity and flash point at section 9
UN proper shipping name	
· DOT, ADN, IMDG, IATA	Not applicable
Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Not applicable
Packing group	
· DOT, IMDĠ, IATA	Not applicable
Environmental hazards:	
· Marine pollutant:	No
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 applicable

15 Regulatory information

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

Requirements of Federal Register

- · Various regulations
 - · SARA
 - · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

(Contd. on page 10)



Printing date 09/14/2022

Version number 6

Reviewed on 05/11/2022

Product number WUM3A417

Trade name: S/S WB UV ARTIC WHITE 5 GL

	(Contd. c	
•	Section 313 (Specific toxic chemical listings):	
112-34-5	2-(2-butoxyethoxy)ethanol	<0.5%
121-44-8	triethylamine	<0.1%
· TSO	CA (Toxic Substances Control Act):	
All compo	nents have the value ACTIVE.	

· Hazardous Air Pollutants

121-44-8 triethylamine

- · Proposition 65
 - Chemicals known to cause cancer:

 Titanium dioxide only in bound form

Titanium dioxide only in bound form		
13463-67-7 Titanium dioxide C.I. 77891 Pigment white 6	only for Dust	12.5-15%
· 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)	
None of the ingredients is listed.	
· TLV (Threshold Limit Value)	
12462 67.7 Titanium diavida C.L. 77001 Diamont white 6	

13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	A4
121-44-8	triethylamine	A4

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

13463-67-7 Titanium dioxide C.I. 77891 Pigment white 6 12.5-15%

· National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· 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: IVM Chemicals Srl
- · Contact: See emergency phone
 - Date of preparation / last revision 09/14/2022 / 5
 - · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health



Printing date 09/14/2022

Version number 6

Reviewed on 05/11/2022

Product number WUM3A417

Trade name: S/S WB UV ARTIC WHITE 5 GL

(Contd. of page 10)

TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flammable Liquids 4: Flammable liquids – Category 4 Acute Toxicity - Oral 3: Acute toxicity – Category 3 Acute Toxicity - Dermal 2: Acute toxicity – Category 2 Skin Corrosion 1B: Skin corrosion/irritation – Category 1B Skin Irrititation 2: Skin corrosion/irritation – Category 2

Eye Damage 1: Serious eye damage/eye irritation – Category 1 Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Skin 1: Skin sensitisation - Category 1 Sensitization - Skin 1A: Skin sensitisation - Category 1A

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

· Sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL and following amendments

Agency ECHA web site INRS Fiche Toxicologique IARC International agency for research on cancer

* Data compared to the previous version altered.

- US