

Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Commercial Product Name : Bond+Seal activating cleaner 400ml

Product code 05501470

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

Use of the Substance/Mixture : Cleaning agent

1.3 Details of the supplier of the safety data sheet

Company : IKO PLC

Appley Lane North Appley Bridge, Wigan, Lancashire WN6 9AB

Telephone : +44 1257 256864

: E-mail address: technical@ikogroup.co.uk

1.4 Emergency number +44 (0)1257 256864 Opening Times: 0900 - 1700 Monday to Friday

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

sure, Category 3, Central nervous system

Classification (REGULATION (EC) No 1272/2008), 453/2010

Aerosols, Category 1 H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Specific target organ toxicity - single expoH336: May cause drowsiness or dizziness.



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

2.2 Label elements

Hazard pictograms







Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.

Precautionary statements : **Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition

source.

P251 Do not pierce or burn, even after use. P280 Wear eye protection/ face protection.

Response:

water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or

doctor/ physician.

Storage:

P410 + P412 Protect from sunlight. Do not expose to tempera-

tures exceeding 50 °C/ 122 °F.

Hazardous components which must be listed on the label:

- isopropanol
- titanium tetrabutanolate

2.3 Other hazards



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (1272/2008/EC) (EU 453/2010)	Concentration [%]	
isopropanol	67-63-0 200-661-7	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	>= 90 - < 95	
titanium tetrabutanolate	5593-70-4 227-006-8	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335, H336	>= 3 - < 5	
Substances with a workplace exposure limit :				
Carbon dioxide	124-38-9 204-696-9	Press. Gas Compr. Gas; H280	>= 2 - < 3	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : If you feel unwell, seek medical advice (show the label where possi-

ble). First aider needs to protect himself. Move out of dangerous area. Never give anything by mouth to an unconscious person. Take

off contaminated clothing and shoes immediately.

If inhaled : If breathed in, move person into fresh air. In the case of inhalation of

aerosol/mist consult a physician if necessary. Keep patient warm and at rest. If not breathing, give artificial respiration. If breathing is diffi-

cult, give oxygen.



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

In case of skin contact : In case of contact, immediately flush skin with soap and plenty of

water. Do NOT use solvents or thinners. If skin irritation persists, call

a physician.

In case of eye contact : Protect unharmed eye. If easy to do, remove contact lens, if worn. In

the case of contact with eyes, rinse immediately with plenty of water

and seek medical advice.

If swallowed : If swallowed, seek medical advice immediately and show this con-

tainer or label. If swallowed, DO NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray jet, Foam, Carbon dioxide (CO2), Dry chemical

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefight-

ing

Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products may be formed under fire conditions (see section 10). Exposure to decomposition products may be a

hazard to health.

5.3 Advice for firefighters

Special protective equipment for

firefighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information : Standard procedure for chemical fires. Use extinguishing measures

that are appropriate to local circumstances and the surrounding environment. In the event of fire and/or explosion do not breathe fumes. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. If the temperature rises there is danger of the vessels bursting due to the high

vapor pressure.



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8. Use personal protective equipment. Remove all sources of ignition. Avoid contact with skin and eyes. Ensure adequate ventilation, especially in confined areas. Immediately evacuate personnel to safe areas. Avoid inhalation of vapour or mist. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations. Clean contaminated surface thoroughly.

6.4 Reference to other sections

see chapter: 7, 8, 11, 12 and 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

: For personal protection see section 8. Limit the stocks at work place. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with skin and eyes. Do not spray on a naked flame or any incandescent material. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Take precautionary measures against static discharges.

Advice on protection against fire and explosion

Normal measures for preventive fire protection. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Keep away from heat and sources of ignition. Do not smoke. No sparking tools should be used. Electrical equipment should be protected to the appropriate standard.



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

Dust explosion class : Not applicable

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas

and containers

Store in original container. BEWARE: Aerosol is pressurized. Keep away from heat. Keep away from direct sunlight. Do not open by force or throw into fire even after use. Do not spray on flames or redhot objects. Keep containers tightly closed in a cool, well-ventilated place. Please observe the storage instructions for aerosols!

Advice on common storage

Keep away from oxidising agents and strongly acid or alkaline mate-

rials.

Keep away from food, drink and animal feedingstuffs. Do not store

together with oxidizing and self-igniting products.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Control parameters	Basis	Update
isopropanol	67-63-0	TWA: 999 mg/m3, 400 ppm STEL: 1.250 mg/m3, 500 ppm	GB EH40	2006-09-01
Carbon dioxide	124-38-9	TWA: 9.150 mg/m3, 5.000 ppm STEL: 27.400 mg/m3, 15.000 ppm	GB EH40	2005-04-06
Carbon dioxide	124-38-9	TWA: 9.000 mg/m3, 5.000 ppm	2006/15/EC	2009-12-19

Other information on limit values: see chapter 16



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

8.2 Exposure controls

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit

they must use appropriate certified respirators.

Respirator with combination filter for vapour/particulate (EN 141)

Respirator with filter type A

Hand protection

Material : Nitrile rubber
Glove thickness : 0,45 mm
Break through time: : > 480 min
Directive : DIN EN 374

Remarks : Choose gloves to protect hands against chemicals depending on the

concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves

with the glove manufacturer.

<u>Eye protection</u>: Tightly fitting safety goggles

Skin and body protection : Flame retardant antistatic protective clothing.

Choose body protection according to the amount and concentration

of the dangerous substance at the work place.



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

<u>Hygiene measures</u>: Handle in accordance with good industrial hygiene and safety prac-

tice.

General industrial hygiene practice.

Do not inhale aerosol.

Avoid contact with skin, eyes and clothing. When using do not eat, drink or smoke.

Wash hands before breaks and at the end of workday.

Follow the skin protection plan.

Take off all contaminated clothing immediately. Wash contaminated clothing before re-use.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform respec-

tive authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : aerosol

Propellant : Carbon dioxide (CO2)

Colour : transparent
Odour : alcohol-like
Odour Threshold : No data available
Flash point : No data available

Ignition temperature : 400 °C

Thermal decomposition : No data available

Lower explosion limit : 2,0 %(V)

Upper explosion limit : 12 %(V)

Explosive properties : Not explosive

In use, may form flammable/explosive vapour-air mixture.

Flammability : solid / gaseous: Flammable

Oxidizing properties : No data available Auto-ignition temperature : No data available



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

Burning number : No data available
Molecular weight : No data available
pH : No data available
Melting point/range : No data available
Boiling point/boiling range : No data available
Vapour pressure : 6 bar at 20 °C

Density : 0,79 g/cm3 at 20 °C

Bulk density : No data available Water solubility : partly soluble

Partition coefficient: n-

octanol/water

No data available

Solubility in other solvents No data available Viscosity, dynamic No data available Viscosity, kinematic : No data available Flow time No data available Impact sensitivity No data available : No data available Relative vapour density Surface tension : No data available Evaporation rate : No data available Minimum ignition energy : No data available Acid number : No data available Refraction index : No data available Miscibility in water : No data available Solvent separation test : No data available

9.2 Other information

None known.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Stability : No decomposition if stored and applied as directed.



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

Vapours may form explosive mixtures with air. If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Acids, Bases, Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition prod-

: Carbon oxides, Nitrogen oxides (NOx)

ucts

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity:

isopropanol : LD50 Rat: 5.045 mg/kg

titanium tetrabutanolate : LD50 Rat: > 2.000 mg/kg

Acute inhalation toxicity:

isopropanol : LC50 Rat: 46,5 mg/l

Exposure time: 4 h

titanium tetrabutanolate : LC50 Rat: 11 mg/l

Test atmosphere: dust/mist

Exposure time: 4 h

Carbon dioxide : LC50 Rat: 58750 ppm

Test atmosphere: gas Exposure time: 4 h

Acute dermal toxicity:

isopropanol : LD50 Rabbit: 12.800 mg/kg

Acute toxicity (other routes of administration):

No data available



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

Skin corrosion/irritation

titanium tetrabutanolate : Skin irritation

Serious eye damage/eye irritation

isopropanol : Irritating to eyes.

titanium tetrabutanolate : Species: Rabbit

Irreversible effects on the eye

Respiratory or skin sensitisation

Sensitisation:

titanium tetrabutanolate : Test Method: Local lymph node assay (LLNA)

Species: Mouse

Classification: Does not cause skin sensitisation.

Germ cell mutagenicity

Genotoxicity in vitro:

titanium tetrabutanolate : Type: Ames test

Result: negative

Method: OECD Test Guideline 471

Genotoxicity in vivo:

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Teratogenicity

No data available

STOT - single exposure

isopropanol : May cause drowsiness or dizziness.

titanium tetrabutanolate : May cause respiratory irritation.

Exposure routes: inhalation (vapour)

Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

May cause drowsiness or dizziness.

STOT - repeated exposure

No data available

Aspiration hazard

Aspiration toxicity

No data available

Neurological effects

No data available

Toxicology Assessment

Toxicology, Metabolism, Distribution

No data available

Acute effects

No data available

Further information : Symptoms of overexposure may be headache, dizziness, tiredness,

nausea and vomiting.

Vapours may cause drowsiness and dizziness.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish

isopropanol : LC50 (Pimephales promelas (fathead minnow)): 9.640 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates

isopropanol : EC50 (Daphnia magna (Water flea)): 13.299 mg/l

Exposure time: 48 h

12.2 Persistence and degradability

No data available



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 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.

12.6 Other adverse effects

<u>Additional ecological information</u>: The product should not be allowed to enter drains, water courses or

the soil.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Advice on disposal and packag-

ing

: Disposal:

In accordance with local and national regulations. This material and

its container must be disposed of as hazardous waste.

Waste codes should be assigned by the user based on the applica-

tion for which the product was used.

The following Waste Codes are only suggestions:

Waste Code (EWC) : Waste Key (unused product):

160504, gases in pressure containers (including halons) containing

dangerous substances

Waste key (used product):

160504, gases in pressure containers (including halons) containing

dangerous substances

Disposal of uncleaned packag-

ing

Waste key (uncleaned packaging):

150110, packaging containing residues of or contaminated by dan-

gerous substances

Note: Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn, or use a cutting torch on, the empty drum. Please ensure aerosol cans are sprayed completely empty (including propellant) Containers that have not been emptied in compliance with regulations are regarded as hazardous

waste. Dispose of as unused product.



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

SECTION 14: Transport information

14.1 UN number

ADR : 1950 RID : 1950 IMDG : 1950 IATA : 1950

14.2 Proper shipping name

ADR : AEROSOLS RID : AEROSOLS IMDG : AEROSOLS

IATA : AEROSOLS, FLAMMABLE

14.3 Transport hazard class(es)

 ADR
 : 2

 RID
 : 2

 IMDG
 : 2.1

 IATA
 : 2.1

14.4 Packing group

ADR

Classification Code : 5F
Labels : 2.1
Limited quantity : 1,00 L
Tunnel restriction code : (D)

RID

Classification Code : 5F
Hazard Identification Number : 23
Labels : 2.1
Limited quantity : 1,00 L

IMDG

Labels : 2.1 EmS Number : F-D, S-U

IATA

Packing instruction (cargo air- : 203

craft)

Packing instruction (passenger : 203

aircraft)

Packing instruction (LQ) : Y203 Labels : 2.1

14.5 Environmental hazards

ADR

Environmentally hazardous : no



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

RID

Environmentally hazardous

IMDG

Marine pollutant : no

IATA

Environmentally hazardous : no

14.6 Special precautions for user

see chapter: 6, 7 and 8

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

VOC : Directive 2010/75/EU of 24 November 2010 on industrial emissions

(integrated pollution prevention and control)

93 %

Update:

VOC content less water: 734,7 g/l

Seveso II - Directive : Update: Quantity 1 Quantity 2

2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Extremely flammable 10 t 50 t

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

FLAMMABLE AEROSOLS 5.000 t 50.000 t

In accordance with Regulation (EC) No. 648/2004 on deter-

gents

This product is subject to the Regulation on Detergents.

National legislation

Other regulations : Take note of Dir 94/33/EC on the protection of young people at work.

Further information : Reserved for industrial and professional use.



Revision: 11.06.2015

IKO Spectraplan Bond and Seal Activating Cleaner: 05501470

15.2 Chemical Safety Assessment

No data available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

Other information

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.

Version History.

Version 1.0 June 2015 New release for Classifiaction, Labelling Packaging Regulations

17 / 17