



1 Identification of the substance/preparation and of the company/undertaking

· **Product details**

· **Trade name: B8701 KNOxOUT Air Cleaning Paint**

· **Application of the substance / the preparation**

Boysen KNOxOUT is the first air cleaning paint in the world with CristalActiv photocatalytic technology. It uses light energy to break down noxious air pollutants and convert them into harmless substances. Any surface coated with KNOxOUT becomes an active air-purifying surface that helps protect people from harmful gases. Photocatalysis also provides KNOxOUT with self-cleaning, anti-bacterial and de-odorizing properties.

· **Manufacturer/Supplier:**

Pacific Paint (Boysen) Philippines, Inc.
292 D. Tuazon St., Quezon City
1115 Philippines

· **Further information obtainable from:** Product safety department

· **Information in case of emergency:**

Telephone Nos.: +63 2 364 3505

+63 2 365 0561

Facsimile Nos.: +63 2 367 8878

+63 2 364 0472

Email Address : inquiry@boysen.com.ph

Website Address : www.boysen.com.ph

2 Hazards identification

· **Hazard description:**



Xi Irritant

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 37/38 Irritating to respiratory system and skin.

R 41 Risk of serious damage to eyes.

R 43 May cause sensitisation by skin contact.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **GHS label elements**



Warning

3.4/1 - May cause an allergic skin reaction.

Warning

3.2/3 - Causes mild skin irritation.

3.3/2B - Causes eye irritation.

· **Prevention:**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

· **Response:**

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Specific treatment (see on this label).
 If skin irritation occurs: Get medical advice/attention.
 If skin irritation or rash occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 Wash contaminated clothing before reuse.

Disposal:














Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

Chemical characterization

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 1317-65-3	Limestone  Xi; R 37/38-41 Danger:  3.3/1, 3.2/2 Warning:  3.8/3	10-25%
CAS: 471-34-1 EINECS: 207-439-9	calcium carbonate	2.5-10%
CAS: 7440-21-3 EINECS: 231-130-8	silicon Warning:  2.7/2	2.5-10%
CAS: 9004-62-0 EINECS: 217-576-6	Hydroxyethyl starch  T,  Xi; R 23/24/25-36/37/38 Danger:  3.1.O/2, 3.1.D/2, 3.1.I/2, 3.2/2, 3.3/2A, 3.8/3	≤ 2.5%
CAS: 55965-84-9	mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2-Hisothiazol-3-one [EC no. 220-239-6] (3:1) mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)  T,  C,  N; R 23/24/25-34-43-50/53 Danger:  3.1.O/2, 3.1.D/2, 3.1.I/2, 3.4.S/1;  3.2/IB Warning:  4.1.C/1	≤ 2.5%

Additional information:

For the wording of the listed risk phrases refer to section 16.

CAS: 7732-18-5 EINECS: 231-791-2	water, distilled, conductivity or of similar purity	25-50%
CAS: 13463-67-7 EINECS: 236-675-5	titanium dioxide	10-25%

4 First aid measures

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. Then consult a doctor.

After swallowing: If symptoms persist consult doctor.

5 Fire-fighting measures

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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· **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

471-34-1 calcium carbonate

PEL (USA)	15* 5** mg/m ³ *total dust **respirable fraction
REL (USA)	10* 5** mg/m ³ *total dust **respirable fraction
TLV (USA)	TLV withdrawn

7440-21-3 silicon

PEL (USA)	15* 5** mg/m ³ *total dust **respirable fraction
REL (USA)	10* 5** mg/m ³ *total dust **respirable fraction
TLV (USA)	TLV withdrawn

- **Additional information:** The lists valid during the making were used as basis.

- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **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:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 100°C

· **Flash point:** Not applicable.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Vapour pressure at 20°C:** 23 hPa

· **Density at 29°C:** 1.42 - 1.52 g/cm³ (ASTM D1475)

· **Solubility in / Miscibility with water:** Fully miscible

· **pH-value at 29°C:** 8.0 - 9.5 (Direct Reading)

· **Viscosity:**
Dynamic at 29°C: 85 - 90 KU (ASTM D562)

· **Solvent content:**

Organic solvents:	0.2 %
Water:	44.2 %
VOC (EC)	19.6 g/L

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· **Solids content:** 35.4 % (ASTM D2469 - 95)

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant
- **Sensitisation** May cause sensitisation by skin contact.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Maritime transport IMDG:**
- **Marine pollutant:** No

15 Regulatory information

· Philippines Inventory of Chemicals and Chemical Substances

1317-65-3	Limestone
13463-67-7	titanium dioxide
471-34-1	calcium carbonate
7440-21-3	silicon
25265-77-4	2,2,4-trimethyl-1,3 pentanediol-monoisobutyrate Texanol
7631-86-9	silicon dioxide, chemically prepared
21645-51-2	aluminium hydroxide
9004-62-0	Hydroxyethyl starch
124-68-5	2-amino-2-methylpropanol
64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic
7631-99-4	sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen

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50-00-0	formaldehyde
10377-60-3	Magnesium nitrate 6-hydrate Magnesium (II), hexahydrate Nitric acid, magnesium salt, hexahydrate
55965-84-9	mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1) mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**



Xi Irritant

· **Hazard-determining components of labelling:**

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1) mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)

· **Risk phrases:**

37/38 Irritating to respiratory system and skin.

41 Risk of serious damage to eyes.

43 May cause sensitisation by skin contact.

· **Safety phrases:**

2 Keep out of the reach of children.

24/25 Avoid contact with skin and eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

37/39 Wear suitable gloves and eye/face protection.

46 If swallowed, seek medical advice immediately and show this container or label.

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.

· **Relevant R-phrases**

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

34 Causes burns.

36/37/38 Irritating to eyes, respiratory system and skin.

37/38 Irritating to respiratory system and skin.

41 Risk of serious damage to eyes.

43 May cause sensitisation by skin contact.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Department issuing MSDS:**

Safety, Health and Environment Department

Gretchen A. Fontejon - g_fontejon@boysen.com.ph

Joanne C. Ysrael - joanneysrael@boysen.com.ph

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)

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· * *Data compared to the previous version altered.*

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