White Board Cleaner/ [WBC01]

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Luxor Nano Technology Pvt. Ltd

Prepared by : TUV SUD South Asia

Version No: **1.2**

Safety Data Sheet (Conforms to Regulations (EC) No 453/2010)

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1.Product Identifier

Product name	White Board Cleaner/ [WBC01]
Synonyms	Not Available
Other means of identification	Not Available

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

Relevant identified uses	Stationary
Uses advised against	Not Applicable

1.3.Details of the manufacturer/importer

Registered company name	Luxor Nano Technology Pvt. Ltd
Address	229,Okhla Industrial Estate,Phase III, New Delhi- 110020[India] India
Telephone	011- 43117311; 011- 26849211
Fax	Not Available
Website	Not Available
Email	sk.garg@luxoroffice.com

1.4.Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	+91- 9810271961
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Considered a dangerous mixture according to directive 1999/45/EC, Reg. (EC) No 1272/2008 (if applicable) and their amendments.
Not classified as Dangerous Goods for transport purposes.

CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability	1	
Toxicity	0	
Body Contact	3	
Reactivity	0	
Chronic	1	

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

DSD classification	In case of mixtures, classification has been prepared by following DPD (Directive 1999/45/EC) and CLP Regulation (EC) No 1272/2008 regulations
DPD classification [1]	R41 Risk of serious damage to eyes. R67 Vapours may cause drowsiness and dizziness.
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from EC Directive 67/548/EEC - Annex I ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI*
Classification according to regulation (EC) No 1272/2008 [CLP] [1]	Serious Eye Damage Category 1, STOT - SE (Narcosis) Category 3
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from EC Directive 67/548/EEC - Annex I ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI*

2.2. Label elements

CLP label elements	
SIGNAL WORD	**DANGER**

Hazard statement(s)

H318	Causes serious eye damage
H336	May cause drowsiness or dizziness

Supplementary statement(s)

Not Applicable

Precautionary statement(s) Prevention

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.

Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/physician/first aider
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

2.3. Other hazards

	Ingestion may produce health damage*.
	Cumulative effects may result following exposure*.
	Limited evidence of a carcinogenic effect*.

REACh - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 COMPOSITIONS / INFORMATION ON INGREDIENTS

3.1. Substances

See 'Composition on ingredients' in Section 3.2

3.2. Mixtures

1. CAS No 2. EC No 3. Index No 4. REACH No	%[weight]	Name	Classification according to directive 67/548/EEC [DSD]	Classification according to regulation (EC) No 1272/2008 [CLP]
1.7732-18-5 2.231-791-2 3.Not Available 4.Not Available	48.995	water	Not Applicable	Not Applicable
1.71-23-8 2.200-746-9 3.603-003-00-0 4.01-2119486761-29-XXXX	30	n-propanol	R11, R41, R67 [2]	Flam. Liq. 2, Eye Dam. 1, STOT SE 3; H225, H318, H336 [3]
1.67-63-0 2.200-661-7 3.603-117-00-0 4.01-2119457558-25-XXXX	20	isopropanol	R11, R36, R67 [2]	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225, H319, H336 [3]
1.7722-88-5 2.231-767-1 3.Not Available 4.01-2119489794-17-XXXX	0.2	tetrasodium pyrophosphate	R36, R53 [1]	Eye Irritation Category 2, Chronic Aquatic Hazard Category 4; H319, H413 [1]

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1.497-19-8 2.207-838-8, 231-420-4 3.011-005-00-2 4.01-2119485498-19-XXXX	0.2	sodium carbonate	R36 [2]	Eye Irrit. 2; H319 [3]
1.7601-54-9 2.231-509-8 3.Not Available 4.01-2119489800-32-XXXX	0.2	trisodium phosphate	R53, R41, R35	Metal Corrosion Category 1, Skin Corrosion/Irritation Category 1A, Serious Eye Damage Category 1, Chronic Aquatic Hazard Category 4; H290, H314, H318, H413 [1]
1.57-13-6 2.200-315-5 3.Not Available 4.01-2119463277-33-XXXX	0.2	urea	R36/37/38 [1]	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2, STOT - SE (Resp. Irr.) Category 3; H315, H319, H335
1.9003-39-8 2.Not Available 3.Not Available 4.Not Available	0.2	vinylpyrrolidone homopolymer	Not Applicable	Not Applicable
1.50-00-0 2.200-001-8 3.605-001-00-5 4.01-2119513723-45-XXXX, 01-2119488953-20-XXXX	0.005	formaldehyde	R23/24/25, R34, R43, R45, R68 [2]	Carc. 1B, Muta. 2, Acute Tox. 3*, Acute Tox. 3*, Acute Tox. 3*, Skin Corr. 1B, Skin Sens. 1; H350, H341, H301, H311, H331, H314, H317 [3]

Legend: *1. Classified by Chemwatch; 2. Classification drawn from EC Directive 67/548/EEC - Annex I; 3. Classification drawn from EC Directive 1272/2008 - Annex VI 4. Classification drawn from C&L*

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures

General

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.
- If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

If this product comes in contact with the eyes:

- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. If skin or hair contact occurs:
- Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

Eye Contact

If this product comes in contact with the eyes:

- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

Inhalation

- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

Ingestion

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.
- If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
For acute or short term repeated exposures to isopropanol:

- Rapid onset respiratory depression and hypotension indicates serious ingestions that require careful cardiac and respiratory monitoring together with immediate intravenous access.
- Rapid absorption precludes the usefulness of emesis or lavage 2 hours post-ingestion. Activated charcoal and cathartics are not clinically useful. Ipecac is most useful when given 30 mins. post-ingestion.
- There are no antidotes.
- Management is supportive. Treat hypotension with fluids followed by vasopressors.
- Watch closely, within the first few hours for respiratory depression; follow arterial blood gases and tidal volumes.
- Ice water lavage and serial haemoglobin levels are indicated for those patients with evidence of gastrointestinal bleeding.

SECTION 5 FIREFIGHTING MEASURES

5.1. Extinguishing media

The product contains a substantial proportion of water; therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

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	Though the material is non- combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances. In such an event consider: foam.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.

5.3. Advice for firefighters

Fire Fighting	▸ Alert Fire Brigade and tell them location and nature of hazard. ▸ Wear full body protective clothing with breathing apparatus. ▸ Prevent, by any means available, spillage from entering drains or water course. Use ▸ water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	**WARNING:** In use may form flammable/ explosive vapour-air ▸ mixtures. Combustible. ▸ Slight fire hazard when exposed to heat or flame. ▸ Heating may cause expansion or decomposition leading to violent rupture of containers.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

	See section 8

6.2. Environmental precautions

	See section 12

6.3. Methods and material for containment and cleaning up

Minor Spills	▸ Remove all ignition sources. ▸ Clean up all spills immediately. ▸ Avoid breathing vapours and contact with skin and eyes. ▸ Control personal contact with the substance, by using protective equipment.
Major Spills	Moderate hazard. ▸ Clear area of personnel and move upwind. ▸ Alert Fire Brigade and tell them location and nature of hazard. ▸ Wear breathing apparatus plus protective gloves.

6.4. Reference to other sections

	Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling	▸ **DO NOT** allow clothing wet with material to stay in contact with skin The substance accumulates peroxides which may become hazardous only if it evaporates or is distilled or otherwise treated to concentrate the peroxides. The substance may concentrate around the container opening for example. Purchases of peroxidisable chemicals should be restricted to ensure that the chemical is used completely before it can become peroxidised. ▸ A responsible person should maintain an inventory of peroxidisable chemicals or annotate the general chemical inventory to indicate which chemicals are subject to peroxidation.
Fire and explosion protection	See section 5
Other information	▸ Store in original containers. Keep ▸ containers securely sealed. ▸ No smoking, naked lights or ignition sources. ▸ Store in a cool, dry, well-ventilated area.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	▸ Metal can or drum ▸ Packaging as recommended by manufacturer. ▸ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Isopropanol (syn: isopropyl alcohol, IPA): ▸ forms ketones and unstable peroxides on contact with air or oxygen; the presence of ketones especially methyl ethyl ketone (M EK, 2-butanone) will accelerate the rate of peroxidation ▸ reacts violently with strong oxidisers, powdered aluminium (exothermic), crotonaldehyde, diethyl aluminium bromide (ignition), dioxygenyl tetrafluoroborate (ignition/ ambient temperature), chromium trioxide (ignition), potassium-tert-butoxide (ignition), nitroform (possible explosion), oleum (pressure increased in closed container), cobalt chloride, aluminium triisopropoxide, hydrogen plus palladium dust (ignition), oxygen gas, phosgene, phosgene plus iron salts (possible explosion), sodium dichromate plus sulfuric acid (exothermic/ incandescence), triisobutyl aluminium ▸ reacts with phosphorus trichloride forming hydrogen chloride gas ▸ reacts, possibly violently, with alkaline earth and alkali metals, strong acids, strong caustics, acid anhydrides, halogens,aliphatic amines, aluminium isopropoxide, isocyanates, acetaldehyde, barium perchlorate (forms highly explosive perchloric ester compound), benzoyl perox ide, chromic acid, dialkylzincs, dichlorine oxide, ethylene oxide (possible explosion), hexamethylene diisocyanate (possible explosion), hydrogen peroxide (forms explosive compound), hypochlorous acid, isopropyl chlorocarbonate, lithium aluminium hydride, lithium tetrahydroaluminate, nitric acid, nitrogen dioxide, nitrogen tetraoxide (possible explosion), pentafluoroguanidine, perchloric acid (especially hot), permonosulfuric acid, phosphorus pen tasulfide, tangerine oil, triethylaluminium, triisobutylaluminium, trinitromethane ▸ attacks some plastics, rubber and coatings reacts with metallic aluminium at high temperature may generate electrostatic charges

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Alcohols
- are incompatible with strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents.
- reacts, possibly violently, with alkaline metals and alkaline earth metals to produce hydrogen
- react with strong acids, strong caustics, aliphatic amines, isocyanates, acetaldehyde, benzoyl peroxide, chromic acid, chromium oxide, dialkylzincs, dichlorine oxide, ethylene oxide, hypochlorous acid, isopropyl chlorocarbonate, lithium tetrahydroaluminate, nitrogen dioxide, pentafluoroguanidine, phosphorus halides, phosphorus pentasulfide, tangerine oil, triethylaluminium, triisobutylaluminium
- should not be heated above 49 deg. C. when in contact with aluminium equipment

Formaldehyde:
- is a strong reducing agent
- may polymerise in air unless properly inhibited (usually with methanol up to 15%) and stored at controlled temperatures
- will polymerize with active organic material such as phenol
- reacts violently with strong oxidisers, hydrogen peroxide, potassium permanganate, acrylonitrile, caustics (sodium hydroxide, yielding formic acid and flammable hydrogen), magnesium carbonate, nitromethane, nitrogen oxides (especially a elevated temperatures), peroxyformic acid
- is incompatible with strong acids (hydrochloric acid forms carcinogenic bis(chloromethyl)ether*), amines, ammonia, aniline, b isulfides, gelatin, iodine, magnesite, phenol, some monomers, tannins, salts of copper, iron, silver.
- acid catalysis can produce impurities: methylal, methyl formate

Aqueous solutions of formaldehyde:
- slowly oxidise in air to produce formic acid
- attack carbon steel

Concentrated solutions containing formaldehyde are:
- unstable, both oxidising slowly to form formic acid and polymerising; in dilute aqueous solutions formaldehyde appears as monomeric hydrate (methylene glycol) - the more concentrated the solution the more polyoxymethylene glycol occurs as oligomers and polymers (methanol and amine-containing compounds inhibit polymer formation)
- readily subject to polymerisation, at room temperature, in the presence of air and moisture, to form paraformaldehyde (8-100 units of formaldehyde), a solid mixture of linear polyoxymethylene glycols containing 90-99% formaldehyde; a cyclic trimer, trioxane (CH_2O_3), may also form

Flammable and/or toxic gases are generated by the combination of aldehydes with azo, diazo compounds, dithiocarbamates, nitrides, and strong reducing agents

*The empirical equation may be used to determine the concentration of bis(chloromethyl)ether (BCME) formed by reaction with HCl:
log(BCME)ppb = -2.25 + 0.67• log(HCHO) ppm + 0.77• log(HCl)ppm

Assume values for formaldehyde, in air, of 1 ppm and for HCl of 5 ppm, resulting BCME concentration, in air, would be 0.02 pp b.

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

7.3. Specific end use(s)

See section 1.2

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

DERIVED NO EFFECT LEVEL (DNEL)

Not Available

PREDICTED NO EFFECT LEVEL (PNEC)

Not Available

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
UK Workplace Exposure Limits (WELs)	n-propanol	Propan-1-ol	500 mg/m3 / 200 ppm	625 mg/m3 / 250 ppm	Not Available	Sk
UK Workplace Exposure Limits (WELs)	isopropanol	Propan-2-ol	999 mg/m3 / 400 ppm	1250 mg/m3 / 500 ppm	Not Available	Not Available
UK Workplace Exposure Limits (WELs)	tetrasodium pyrophosphate	Tetrasodium pyrophosphate	5 mg/m3	Not Available	Not Available	Not Available
UK Workplace Exposure Limits (WELs)	formaldehyde	Formaldehyde	2.5 mg/m3 / 2 ppm	2.5 mg/m3 / 2 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
n-propanol	Propyl alcohol, n-; (n-Propanol)	250 ppm	250 ppm	4000 ppm
isopropanol	Isopropyl alcohol	400 ppm	400 ppm	12000 ppm
tetrasodium pyrophosphate	Sodium pyrophosphate decahydrate	4.3 mg/m3	48 mg/m3	290 mg/m3
tetrasodium pyrophosphate	Tetrasodium pyrophosphate	15 mg/m3	130 mg/m3	790 mg/m3
sodium carbonate	Sodium carbonate	12 mg/m3	130 mg/m3	780 mg/m3
trisodium phosphate	Sodium phosphate, tribasic; (Trisodium phosphate)	5 mg/m3	250 mg/m3	1500 mg/m3
urea	Urea	10 mg/m3	10 mg/m3	1700 mg/m3
vinylpyrrolidone homopolymer	Poly(1-vinyl-2-pyrrolidinone) homopolymer; (Polyvinylpyrrolidone; Plasdone)	19 mg/m3	200 mg/m3	20000 mg/m3
formaldehyde	Formaldehyde	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
water	Not Available	Not Available
n-propanol	4,000 ppm	800 ppm
isopropanol	12,000 ppm	2,000 [LEL] ppm

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tetrasodium pyrophosphate	Not Available	Not Available
sodium carbonate	Not Available	Not Available
trisodium phosphate	Not Available	Not Available
urea	Not Available	Not Available
vinylpyrrolidone homopolymer	Not Available	Not Available
formaldehyde	30 ppm	20 ppm

8.2. Exposure controls

8.2.1. Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
8.2.2. Personal protection	
Eye and face protection	‣ Safety glasses with side shields. Chemical goggles. ‣ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical 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. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and.has to be observed when making a final choice. Suitability and durability of glove type is dependent on usage.
Body protection	See Other protection below
Other protection	‣ Overalls. ‣ P.V.C. apron. ‣ Barrier cream.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:
"Forsberg Clothing Performance Index".
The effect(s) of the following substance(s) are taken into account in the ***computer-generated*** selection:
White Board Cleaner/ [WBC01]

Material	CPI
BUTYL	C
NAT+NEOPR+NITRILE	C
NATURAL RUBBER	C
NATURAL+NEOPRENE	C
NEOPRENE	C
NEOPRENE/NATURAL	C
NITRILE	C
NITRILE+PVC	C
PE	C
PE/EVAL/PE	C
PVA	C
PVC	C
TEFLON	C
VITON	C

* CPI - Chemwatch Performance Index A: Best Selection
B: Satisfactory; may degrade after 4 hours continuous immersion C: Poor to Dangerous Choice for other than short term immersion
NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -
* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection

Type BAX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.
Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	BAX-AUS	-	BAX-PAPR-AUS / Class 1
up to 50 x ES	-	BAX-AUS / Class 1	-
up to 100 x ES	-	BAX-2	BAX-PAPR-2 ^

^ - Full-face
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

8.2.3. Environmental exposure controls

Continued...

See section 12

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Colourless liquid

Physical state	Liquid	**Relative density (Water = 1)**	0.913
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Alcoholic Odour	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	10.75	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	Not Available	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Available	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water (g/L)	Miscible	**pH as a solution (1%)**	Not Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available

9.2. Other information

	Not Available

SECTION 10 STABILITY AND REACTIVITY

10.1.Reactivity	See section 7.2
10.2.Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.
Ingestion	Overexposure to non-ring alcohols causes nervous system symptoms. These include headache, muscle weakness and inco-ordination, giddiness, confusion, delirium and coma. The material has **NOT** been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. The calculated human skin permeability coefficient for n-propanol by the U.S. Environment Protection Agency is 1.3 x 10-3 cm/hr. Most liquid alcohols appear to act as primary skin irritants in humans.
Eye	If applied to the eyes, this material causes severe eye damage. Isopropanol vapour may cause mild eye irritation at 400 ppm. Splashes may cause severe eye irritation, possible corneal burns and eye damage. Eye contact may cause tearing or blurring of vision.
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. N-propanol is shown to cause dose dependent severe liver injury, malignant tumours (blood and liver cancers) and benign tumours in rats. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Long term or repeated ingestion exposure of isopropanol may produce incoordination, lethargy and reduced weight gain.

White Board Cleaner/ [	**TOXICITY**	**IRRITATION**

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WBC01	Not Available	Not Available
water	**TOXICITY**	**IRRITATION**
	Oral (rat) LD50: >90000 mg/kg[2]	Not Available
n-propanol	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 4032 mg/kg[1]	Eye (rabbit): 20 mg/24h moderate
	Oral (rat) LD50: 1870 mg/kge[2]	Eye (rabbit): 4 mg open SEVERE
		Skin (rabbit): 20 mg/24h moderate
		Skin (rabbit): 500 mg open mild
isopropanol	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 12792 mg/kg[1]	Eye (rabbit): 10 mg - moderate
	Inhalation (rat) LC50: 72.6 mg/L/4h[2]	Eye (rabbit): 100 mg - SEVERE
	Oral (rat) LD50: 5000 mg/kg[2]	Eye (rabbit): 100mg/24hr-moderate
		Skin (rabbit): 500 mg - mild
tetrasodium pyrophosphate	**TOXICITY**	**IRRITATION**
	dermal (rat) LD50: >2000 mg/kg[1]	Not Available
	Oral (rat) LD50: >300<2000 mg/kg>[1]	
sodium carbonate	**TOXICITY**	**IRRITATION**
	dermal (rat) LD50: >2000 mg/kg*E[2]	Eye (rabbit): 100 mg/24h moderate
	Inhalation (guinea pig) LC50: 0.8 mg/L/2h[2]	Eye (rabbit): 100 mg/30s mild
	Inhalation (mouse) LC50: 1.2 mg/L/2h[2]	Eye (rabbit): 50 mg SEVERE
	Inhalation (rat) LC50: 2.3 mg/L/2he[2]	Skin (rabbit): 500 mg/24h mild
	Oral (rat) LD50: 2800 mg/kg*d[2]	
trisodium phosphate	**TOXICITY**	**IRRITATION**
	dermal (rat) LD50: >2000 mg/kg[1]	- moderate*
	Oral (rat) LD50: 7.4 gm/ Kg[1]	*[CCINFO - Monsanto]
		Eye (rabbit):(FSHA) Corrosive*
		scale of 8.0
		Skin (rabbit):(FSHA) 3.3 on a
urea	**TOXICITY**	**IRRITATION**
	Oral (rat) LD50: 8471 mg/kgd[2]	Skin (human): 22 mg/3 d (I)- mild
vinylpyrrolidone homopolymer	**TOXICITY**	**IRRITATION**
	Inhalation (rat) LC50: >5.2 mg/L/4h **[2]	Eye (rabbit):non-irritating (Draize)*
	Oral (rat) LD50: >100,000 mg/kg**[2]	Skin (rabbit):non-irritating(Draize)**
formaldehyde	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 270 mg/kg[2]	Eye (human): 4 ppm/5m
	Inhalation (rat) LC50: 250 ppm/4H[2]	Eye (rabbit): 0.75 mg/24H SEVERE
	Oral (rat) LD50: 100 mg/kgm[2]	Skin (human): 0.15 mg/3d-I mild
		Skin (rabbit): 2 mg/24H SEVERE

Legend: *1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's msds. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances*

White Board Cleaner [WBC01]	No significant acute toxicological data identified in literature search. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
WATER	No significant acute toxicological data identified in literature search.
N-PROPANOL	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Continued...

ISOPROPANOL	Isopropanol is irritating to the eyes, nose and throat but generally not to the skin. Prolonged high dose exposure may also produce depression of the central nervous system and drowsiness. Few have reported skin irritation. It can be absorbed from the skin or when inhaled.
UREA	Altered sleep time, change in motor activity, antipsychosis, dyspnea, methaemoglobinaemia, convulsions, lymphomas recorded. Carcinogenic by RTECS criteria.
VINYLPYRROLIDONE HOMOPOLYMER	The substance is classified by IARC as Group 3: **NOT** classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Chronic toxicity ** Genetic toxicity: No mutagenic effect was found in various tests with microorganisms and mammalian cell culture. The substance was not mutagenic in studies with mammals. Carcinogenicity: In long-term animal studies in which the substance was given in high doses by feed, a carcinogenic effect was not observed. Developmental toxicity/teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies * ISP MSDS **BASF MSDS
FORMALDEHYDE	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions.
SODIUM CARBONATE & TRISODIUM PHOSPHATE & UREA	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.

Acute Toxicity	⊘	**Carcinogenicity**	⊘
Skin Irritation/Corrosion	⊘	**Reproductivity**	⊘
Serious Eye Damage/Irritation	✔	**STOT - Single Exposure**	✔
Respiratory or Skin sensitisation	⊘	**STOT - Repeated Exposure**	⊘
Mutagenicity	⊘	**Aspiration Hazard**	⊘

Legend: ✔ *– Data required to make classification available*
✘ *– Data available but does not fill the criteria for classification*
⊘ *– Data Not Available to make classification*

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

For n-Propanol: log Kow: 0.25-0.34; Half-life (hr) air: 6.7; Half-life (hr) H2O surface water: 6.5; Henry's atm m3 /mol: 6.85E-06; BOD 5: 1.43-1.6 g O2/g; BOD 20: <2 g O2/g; COD : 91%;
ThOD : 1.8 g; O2/gBCF: 0.7.

Aquatic Fate: High biochemical oxygen demand and a potential to cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to affect secondary waste treatment microbial metabolism. n-Propanol is expected to biodegrade and is not expected to persist for long periods in aquatic environments. When diluted with a large amount of water, n-propanol is not expected to have a significant impact.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
water	LOW	LOW
n-propanol	LOW	LOW
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)
tetrasodium pyrophosphate	HIGH	HIGH
sodium carbonate	LOW	LOW
trisodium phosphate	HIGH	HIGH
urea	LOW	LOW
vinylpyrrolidone homopolymer	LOW	LOW
formaldehyde	LOW (Half-life = 14 days)	LOW (Half-life = 2.97 days)

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
water	LOW (LogKOW = -1.38)

Continued...

n-propanol	LOW (LogKOW = 0.25)
isopropanol	LOW (LogKOW = 0.05)
tetrasodium pyrophosphate	LOW (LogKOW = -1.7388)
sodium carbonate	LOW (LogKOW = -0.4605)
trisodium phosphate	LOW (LogKOW = -0.7699)
urea	LOW (BCF = 10)
vinylpyrrolidone homopolymer	LOW (LogKOW = 0.2484)
formaldehyde	LOW (LogKOW = 0.35)

12.4. Mobility in soil

Ingredient	Mobility
water	LOW (KOC = 14.3)
n-propanol	HIGH (KOC = 1.325)
isopropanol	HIGH (KOC = 1.06)
tetrasodium pyrophosphate	LOW (KOC = 7.883)
sodium carbonate	HIGH (KOC = 1)
trisodium phosphate	HIGH (KOC = 1)
urea	LOW (KOC = 4.191)
vinylpyrrolidone homopolymer	LOW (KOC = 40.46)
formaldehyde	HIGH (KOC = 1)

12.5.Results of PBT and vPvB assessment

	P	B	T
Relevant available data	Not Available	Not Available	Not Available
PBT and vPvB Criteria fulfilled?	Not Available	Not Available	Not Available

12.6. Other adverse effects

No data available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should • investigate: Reduction • Reuse • Recycling • Disposal (if all else fails) This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (Not Applicable): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable
14.2. Packing group	Not Applicable
14.3. UN proper shipping name	Not Applicable
14.4. Environmental hazard	No relevant data
14.5. Transport hazard class(es)	Class: Not Applicable Subrisk: Not Applicable
14.6. Special precautions for user	Hazard identification (Kemler): Not Applicable Classification code: Not Applicable Hazard Label: Not Applicable Special provisions: Not Applicable Explosive Limit and Limited Quantity Index: Not Applicable

Continued...

	ERAP Index	Not Applicable
	Limited quantity	Not Applicable

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable	
14.2. Packing group	Not Applicable	
14.3. UN proper shipping name	Not Applicable	
14.4. Environmental hazard	No relevant data	
14.5. Transport hazard class(es)	ICAO/IATA Class	Not Applicable
	ICAO / IATA Subrisk	Not Applicable
	ERG Code	Not Applicable
14.6. Special precautions for user	Special provisions	Not Applicable
	Cargo Only Packing Instructions	Not Applicable
	Cargo Only Maximum Qty / Pack	Not Applicable
	Passenger and Cargo Packing Instructions	Not Applicable
	Passenger and Cargo Maximum Qty / Pack	Not Applicable
	Passenger and Cargo Limited Quantity Packing Instructions	Not Applicable
	Passenger and Cargo Limited Maximum Qty / Pack	Not Applicable

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable	
14.2. Packing group	Not Applicable	
14.3. UN proper shipping name	Not Applicable	
14.4. Environmental hazard	Not Applicable	
14.5. Transport hazard class(es)	IMDG Class	Not Applicable
	IMDG Subrisk	Not Applicable
14.6. Special precautions for user	EMS Number	Not Applicable
	Special provisions	Not Applicable
	Limited Quantities	Not Applicable

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable	
14.2. Packing group	Not Applicable	
14.3. UN proper shipping name	Not Applicable	
14.4. Environmental hazard	No relevant data	
14.5. Transport hazard class(es)	Not Applicable	Not Applicable
14.6. Special precautions for user	Classification code	Not Applicable
	Limited quantity	Not Applicable
	Equipment required	Not Applicable
	Fire cones number	Not Applicable

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

Source	Ingredient	Pollution Category
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	n-propanol	Y
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	sodium carbonate	Z
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	urea	Z
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	formaldehyde	Y

Continued...

SECTION 15 REGULATORY INFORMATION

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

water(7732-18-5) is found on the following regulatory lists	"European Customs Inventory of Chemical Substances ECICS (English)","European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)","EU REACH Regulation (EC) No 1907/2006 - Annex IV - Exemptions from the Obligation to Register in Accordance with Article 2(7)(a) (English)"
n-propanol(71-23-8) is found on the following regulatory lists	"European Customs Inventory of Chemical Substances ECICS (English)","European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)","EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles","UK Workplace Exposure Limits (WELs)","European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI","European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31"
isopropanol(67-63-0) is found on the following regulatory lists	"European Customs Inventory of Chemical Substances ECICS (English)","European Trade Union Confederation (ETUC) Priority List for REACH Authorisation","International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs","European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)","EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles","UK Workplace Exposure Limits (WELs)","European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI","European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31"
tetrasodium pyrophosphate(7722-88-5) is found on the following regulatory lists	"European Customs Inventory of Chemical Substances ECICS (English)","European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)","UK Workplace Exposure Limits (WELs)"
sodium carbonate(497-19-8) is found on the following regulatory lists	"European Customs Inventory of Chemical Substances ECICS (English)","European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)","European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI","European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31"
trisodium phosphate(7601-54-9) is found on the following regulatory lists	"European Customs Inventory of Chemical Substances ECICS (English)","European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)"
urea(57-13-6) is found on the following regulatory lists	"European Customs Inventory of Chemical Substances ECICS (English)","European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)"
vinylpyrrolidone homopolymer(9003-39-8) is found on the following regulatory lists	"European Customs Inventory of Chemical Substances ECICS (English)","International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs"
formaldehyde(50-00-0) is found on the following regulatory lists	"EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)","European Customs Inventory of Chemical Substances ECICS (English)","European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances (updated by ATP: 31) - Carcinogenic Substances","European Trade Union Confederation (ETUC) Priority List for REACH Authorisation","International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs","EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List of Substances","European List of Notified Chemical Substances (ELINCS)","European Union (EU) Commission Directive 2006/15/EC establishing a second list of indicative occupational exposure limit values (IOELVs)","European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)","UK Workplace Exposure Limits (WELs)","European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI","European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31","European Union (EU) Commission Directive 2006/15/EC establishing a second list of indicative occupational exposure limit values (IOELVs) (Spanish)","Europe AeroSpace and Defence Industries Association of Europe (ASD) REACH Implementation Working Group Priority Declarable Substances List (PDSL)"

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : 67/548/EEC, 1999/45/EC, 98/24/EC, 92/85/EC, 94/33/EC, 91/689/EEC, 1999/13/EC, Regulation (EU) No 453/2010, Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 and their amendments as well as the following British legislation: - The Control of Substances Hazardous to Health Regulations (COSHH) 2002 - COSHH Essentials - The Management of Health and Safety at Work Regulations 1999

15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

ECHA SUMMARY

Ingredient	CAS number	Index No	ECHA Dossier
water	7732-18-5	Not Available	Not Available

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
2	Acute Tox. 3, Skin Corr. 1A, Acute Tox. 2, Flam. Liq. 3	GHS05, Dgr, GHS06, GHS02, Wng	H314, H301, H226

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
n-propanol	71-23-8	603-003-00-0	01-2119486761-29-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Flam. Liq. 2, Eye Dam. 1, STOT SE 3	GHS02, GHS05, Dgr	H225, H318, H336
2	Flam. Liq. 2, Eye Dam. 1, STOT SE 3, Acute Tox. 4	GHS02, GHS05, Dgr, GHS08	H225, H318, H336, H302

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier

Continued...

isopropanol	67-63-0	603-117-00-0	01-2119457558-25-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3	GHS07, GHS02, Dgr	H225, H319, H336
2	Flam. Liq. 2, Eye Irrit. 2, STOT SE 1, Eye Irrit. 2A, Repr. 2, STOT RE 2	GHS02, Dgr, GHS08, GHS03	H225, H319, H370, H312, H340, H302, H361, H373

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
tetrasodium pyrophosphate	7722-88-5	Not Available	01-2119489794-17-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3	GHS07, Wng	H315, H319, H335
2	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, Acute Tox. 4, Eye Dam. 1, Acute Tox. 3	GHS07, Wng, GHS05, Dgr, GHS06	H315, H319, H335, H318, H301, H312

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
sodium carbonate	497-19-8	011-005-00-2	01-2119485498-19-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Eye Irrit. 2	GHS07, Wng	H319
2	Eye Irrit. 2, Eye Irrit. 2A, Acute Tox. 4, STOT SE 3, STOT RE 2, Skin Irrit. 2	Wng, Dgr, GHS08	H319, H261, H252, H332, H335, H302, H373, H315

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
trisodium phosphate	7601-54-9	Not Available	01-2119489800-32-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Skin Irrit. 2, Eye Dam. 1	GHS05, Dgr	H315, H318
2	Eye Dam. 1, STOT SE 3, Skin Corr. 1B, Skin Corr. 1A, Met. Corr. 1, Skin Corr. 1C, Acute Tox. 3	GHS05, Dgr, Wng, GHS06	H318, H335, H314, H290, H331

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
urea	57-13-6	Not Available	01-2119463277-33-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
2	Skin Irrit. 2, Eye Irrit. 2, Carc. 2, STOT SE 2, Aquatic Chronic 4, Acute Tox. 4, Skin Sens. 1, Resp. Sens. 1	Wng, GHS08, Dgr	H315, H319, H335, H351, H413, H302

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
vinylpyrrolidone homopolymer	9003-39-8	Not Available	Not Available

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
Not Available	Not Available	Not Available	Not Available

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
formaldehyde	50-00-0	605-001-00-5	01-2119513723-45-XXXX, 01-2119488953-20-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1, Carc. 2	GHS06, GHS05, GHS08, Dgr	H301, H311, H314, H317, H331, H351
2	Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1, Carc. 2, Eye Dam. 1, Resp. Sens. 1, Acute Tox. 2, STOT SE 2, Met. Corr. 1, Skin Corr. 1C, Muta. 2, Carc. 1A, STOT SE 1, STOT RE 1, Flam. Gas 1, Liq. Gas	GHS06, GHS05, GHS08, Dgr, Wng	H301, H311, H314, H317, H318, H334, H330, H350, H290, H370, H372, H220, H280, H341, H400
1	Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1, Carc. 2	GHS06, GHS05, GHS08, Dgr	H301, H311, H314, H317, H331, H351

Continued...

2 Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1, Carc. 2 H301, H311, H314, H317, H331, H351 GHS08, Dgr		GHS06, GHS05,

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	N (vinylpyrrolidone homopolymer)
Japan - ENCS	N (water)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y
Legend:	*Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)*

SECTION 16 OTHER INFORMATION

Full text Risk and Hazard codes

H220	Extremely flammable gas
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H252	Self-heating in large quantities; may catch fire
H261	In contact with water releases flammable gas
H280	Contains gas under pressure; may explode if heated
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H340	May cause genetic defects
H341	Suspected of causing genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H413	May cause long lasting harmful effects to aquatic life

R11	Highly flammable.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R34	Causes burns.
R35	Causes severe burns.
R36	Irritating to eyes.
R36/37/38	Irritating to eyes, respiratory system and skin.
R43	May cause SENSITISATION by skin contact.
R45	May cause CANCER.
R53	May cause long-term adverse effects in the aquatic environment.

Continued...

R68	Possible risk of irreversible effects.

Other information

DSD / DPD label elements

Relevant risk statements are found in section 2.1

Indication(s) of danger	Xi

SAFETY ADVICE

S02	Keep out of reach of children.
S23	Do not breathe gas/fumes/vapour/spray.
S26	In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
S35	This material and its container must be disposed of in a safe way.
S39	Wear eye/face protection.
S40	To clean the floor and all objects contaminated by this material, use water.
S46	If swallowed, seek medical advice immediately and show this container or label.
S56	Dispose of this material and its container at hazardous or special waste collection point.
S64	If swallowed, rinse mouth with water (only if the person is conscious).

Ingredients with multiple cas numbers

Name	CAS No
tetrasodium pyrophosphate	13472-36-1, 7722-88-5
sodium carbonate	497-19-8, 7542-12-3
trisodium phosphate	7601-54-9, 96337-98-3
vinylpyrrolidone homopolymer	25249-54-1, 9003-39-8
formaldehyde	112068-71-0, 50-00-0, 8005-38-7, 8006-07-3, 8013-13-6

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at: www.chemwatch.net

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:
EN 166 Personal eye-protection
EN 340 Protective clothing
EN 374 Protective gloves against chemicals and micro-organisms
EN 13832 Footwear protecting against chemicals
EN 133 Respiratory protective devices