

SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade Name	Norchem AS 666
Product Synonyms:	Universal Solvent Cleaner
Recommended Use:	An alkaline based degreaser with fortified water dilutable solvents to remove the most stubborn oil deposits
Company Identification:	Goldcrest International Singapore Pte Ltd 38 Tech Park Crescent Singapore 638098
Emergency phone number:	(65) 6862 6006 Tel (65) 6863 3665 Fax

2. HAZARDS IDENTIFICATION

2.1 GHS Classification

PHYSICAL HAZARDS:

Corrosive to Metals - Category 1

HEALTH HAZARDS:

Skin corrosion: Category 2

Serious eye damage/eye irritation – Category 1

ENVIRONMENT

Acute aquatic toxicant: Category 3

2.2 GHS Label elements, including precautionary statements

PICTOGRAM



SIGNAL WORD

Danger

PHYSICAL HAZARDS:

H290 May be corrosive to metals

HEALTH HAZARDS:

H315 Causes skin irritation

H318 Causes serious eye damage

ENVIRONMENTAL HAZARDS

H402 Harmful to aquatic life

Prevention

P234 Keep only in original packaging.

P264 Wash ...thoroughly after handling. ...

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment. – if this is not the intended use.

Response

P390 Absorb spillage to prevent material damage.

P302 + P352 IF ON SKIN: Wash with plenty water/...

P321 Specific treatment (see ... on this label) ... Reference to supplemental first aid instruction.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

P406 Store in a corrosion resistant/... container with a resistant inner liner.

Disposal

P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical Identity	3.2 Common Name/Synonyms	3.3 CAS No.	% Range
Potassium Hydroxide	Caustic Potash	1310-58-3	< 5 %
Sodium metasilicate	-	10213-79-3	< 5 %
Nonylphenol polyethylene glycol ether	-	127087-87-0	< 5 %
Ethoxylated alcohols phosphate ether	-	68130-47-2	< 5 %
Sodium dioctyl sulphosuccinate	-	577-11-7	< 5 %
Dipropylene glycol monomethyl ether	-	34590-94-8	< 5 %
Isopropyl Alcohol	IPA	67-63-0	< 5 %
Water	-	7732-18-5	Balance

4. FIRST AID MEASURES

4.1 Description of first-aid measures

General advice: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

General Advice

Eye Contact	Rinse opened eye for several minutes under running water. Then consult a doctor.
Skin Contact	Immediately flush with water for at least 15 minutes.
Inhalation	Supply fresh air; consult doctor in case of complaints.
If swallowed	Rinse out mouth and then drink plenty of water. Seek medical treatment.

4.2 Most important symptoms/effects, acute and delayed

No data available

4.3 Indication of immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

Water spray, foam, dry chemical, or carbon dioxide

5.2 Specific hazards arising from the chemical

Sodium oxides, Silicon oxides, Phosphorus oxides, Potassium oxides, Carbon monoxide (CO) - these toxic gases may be released in case of fire,

5.3 Special protective actions for fire-fighters

Firefighters, and others exposed, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin & eyes. Use chemical resistance gloves, goggles to prevent direct contact with body tissues.
Hazard identification Section for Significant Hazards. See Section 4 for First Aid Advice.
Use personal protective clothing. Information regarding personal protective measures see, section 8.
depending on the specific circumstances and/or the expert judgment of the emergency responders.
For emergency responders: Respiratory protection: half-face or full-face respirator with filter(s) for vapours/aerosol.
Small spills: chemical resistance apron is usually adequate.
Large spills full body suit of chemical resistant is recommended.

6.2 Environmental precautions

Do not allow product to reach sewage system or the environment.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to penetrate the ground/soil.
Inform responsible authorities in case of seepage into the ground.

6.3 Methods and materials for containment and cleaning up

Recovery : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Sweep up or vacuum up spillage and collect in suitable container for disposal.
Never return spills in original containers for re-use.

Decontamination/cleaning : Clean contaminated surface thoroughly.
Wash non-recoverable remainder with large amounts of water.
Recover the cleaning water for subsequent disposal.
Decontaminate tools, equipment and personal protective equipment in a segregated area.
Neutralization : Absorb non-recoverable liquid with: Sand
Disposal : Dispose of in accordance with local regulations.
Additional advice : Material can create slippery conditions.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling and usage :

Handle in accordance with good industrial hygiene and safety practice.
Avoid splashes. Avoid the formation or spread of mists in the atmosphere.
Avoid inhalation, ingestion and contact with skin and eyes.

Hygiene measures :

Emergency equipment immediately accessible, with instructions for use.
Ensure that eyewash stations and safety showers are close to the workstation location.
Regular cleaning of equipment, work area and clothing.
Use clean, well-maintained personal protection equipment.
Store personal protection equipment in a clean location away from the work area.
Keep working clothes separately. Contaminated work clothing should not be allowed out of the workplace.
Contaminated clothing must never be washed or reused.
Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke.
The product must only be handled by specifically trained employees.
Use clean, well-maintained personal protection equipment

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures for storage :

Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

Storage conditions

Recommended : Protect from moisture. Keep in a well-ventilated place.
Keep away from incompatible materials to be indicated by the manufacturer
Incompatible products : Strong acids Strong bases Strong oxidizing agents Strong reducing agents.

Packaging Measures

Packaging materials - Recommended : Plastic materials. To be avoided : Aluminium
Storage temperature : < 30 °C

7.3 Specific end use(s) no data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Chemical Identity	Source	TWA	STEL
Potassium Hydroxide	SG PEL	2 mg/m ³	No Data Available
Sodium metasilicate	-	No Data Available	No Data Available
Nonylphenol polyethylene glycol ether	-	No Data Available	No Data Available
Ethoxylated alcohols phosphate ether	-	No Data Available	No Data Available
Sodium dioctyl sulphosuccinate	-	No Data Available	No Data Available
Dipropylene glycol monomethyl ether	SG PEL	606 mg/m ³ 100ppm TWA	909 mg/m ³ 150 ppm
Isopropyl Alcohol	SG PEL	983 mg/m ³ 400ppm TWA	1230 mg/m ³ 500ppm
Ethylenedinitrilotetraacetic acid	-	No Data Available	No Data Available

8.2 Appropriate engineering controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

8.3 Individual protection measures, such as personal protective equipment (PPE)

General	Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Do not inhale dust I smoke I mist. Vacuum clean contaminated clothing. Do not blow or brush off contamination.
Hand Protection	Wash hands before breaks and at the end of work. Wear Protective gloves (Check protective gloves for proper condition before use). To avoid skin problems reduce the wearing of gloves to the required minimum. Preventive skin protection by using skin-protecting agents is recommended. After use of gloves apply skin-cleaning agents and skin cosmetics.
Eye protection	Wear tightly sealed goggles & Avoid contact with the eyes.
Skin Protection	Wear protective work clothing & Avoid contact with the skin. Use skin protection cream for skin protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

PHYSICAL PROPERTIES

Appearance:	Physical State	Liquid
	Colour	Clear Amber
Odour		Light Organic Odour
Odour threshold;		Not available
pH (100%)		13.5 ±0.5
Melting Point:		Not available
Boiling Point:		203°C - 260°C
Flash point:		Not available
Evaporation Rate:		Not available
Flammability (solid, gas);		Not applicable
Flamrnable Limits (Approxlmate volume % In alr): LEL & UEL:		Not available
Vapour Pressure:		Not available
Vapour density:		Not available
Specific Gravity		1.05
Solubility In Water		Complete
Partition coefficient: n-octanol/water;		Not available
Auto-ignition temperature:		Not available
Decomposition Temperature:		Not available
Viscosity		Not available

9.2 Other information

Not available

10. STABILITY AND REACTIVITY

10.1 Reactivity	No known reactivity hazard
10.2 Chemical Stability	Stable under normal conditions.
10.3 Hazardous Reaction	No known Hazardous Reaction or Polymerization
10.4 Conditions To Avoid	Heat, open flames and high energy ignition sources.
10.5 Incompatible Materials	Strong Acids, Strong Bases, Oxidisers, Strong Reducing agent
10.6 Hazardous Decomposition Products	Under fire conditions: Potassium oxides, Sodium oxides, Silicon oxides, Phosphorus oxides, Carbon Monoxide; - can be released in case of fire, these can have a fire-promoting effect due to release of oxygen.

11. TOXICOLOGICAL INFORMATION

11.1 Toxicological information

Ingredients

	Potassium Hydroxide 1310-58-3	Sodium metasilicate 10213-79-3	Nonylphenol polyethylene glycol ether 127087-87-0	Ethoxylated alcohols phosphate ether 68130-47-2	Sodium dioctyl sulphosuccinate 577-11-7	Dipropylene glycol monomethyl ether 34590-94-8	Isopropyl Alcohol 67-63-0
Acute toxicity	Category 4	Category 4	Category 4	Category 5	Not classified	Not classified	Category 5
Oral LD50 : mg/kg	rat 333	rat 847	rat 960 - 3980	rat 3,950	rat >5000	rat >5000	rat > 2000 =<5000
Dermal LD50 mg/kg	Not Available	Not Available	rabbit 2000 - 2991	rabbit > 4640	rabbit >2000	rabbit 9510	rabbit >5000
Inhalation LC50 g/m3	Not Available	Not Available	rat 4h 1.15	Not Available	rat 4h >20	rat 7h 3.36	Not Available

Mixture : AS 666

Skin corrosion / irritation	Corrosion Category 2
Serious eye damage / eye irritation	Serious eye damage/eye irritation – Category 1
Sensitization	Dermal Not classified Inhalation Not classified
Germ cell mutagenicity;	Not classified
Carcinogenicity;	Not classified
Reproductive toxicity;	Not classified
STOT-single exposure;	Not classified
STOT-repeated exposure;	Not classified
Aspiration hazard	Not classified
Potential health effects	
Inhalation	May be harmful if inhaled.
Ingestion	Harmful if swallowed. Causes burns, May cause damage to organs
Skin	May be harmful if absorbed through skin. Causes severe skin burns.
Eyes	Causes serious eye damage

12. ECOLOGICAL INFORMATION**12.1 Toxicity****Ingredients**

	Potassium Hydroxide 1310-58-3	Sodium metasilicate 10213-79-3	Nonylphenol polyethylene glycol ether 127087-87-0	Ethoxylated alcohols phosphate ether 68130-47-2	Sodium dioctyl sulphosuccinate 577-11-7	Dipropylene glycol monomethyl ether 34590-94-8	Isopropyl Alcohol 67-63-0
Aquatic toxicity							
Acute	Not Classified	Not Classified	Category 2	Category 2	Not Classified	Not Classified	Not Classified
Chronic	Not Classified	Not Classified	Not Classified	Not Classified	Not Classified	Not Classified	Not Classified
Fish LC50 (h) mg/l	Gambusia affinis, 96 h 80	no available data	fathead minnow, 96 h 3.8 - 6.2	Oncorhynchus mykiss, 96 h 5.5	rainbow trout 96 h >10 - 100	Poecilia reticulata 96 h >1,000	Fish ND h 100
Crustacea LC50 (h) mg/l	no available data	no available data	no available data	no available data	no available data	Crangon crangon 96 h > 1,000	no available data
Invertebrate EC50 (h) mg/l	no available data	no available data	Daphnia magna 48 h 9.3 - 21.4	no available data	water flea 48 h >10 - 100	Daphnia magna 48 h 1,919	Aquatic Invertebrates ND h 100

12.2 Persistence and degradability: Biodegradability

No data available

12.3 Bioaccumulative potential: Bioaccumulation

No data available

12.4 Mobility in soil: Distribution among environment compartments

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects: Additional ecological information

Do not allow to enter soil, waterways or waste water channels. Do not release untreated into natural waters.

13. DISPOSAL CONSIDERATION**13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

If disposal is necessary, do not dispose into sewage. Consult local, state and federal regulations.

Contaminated packaging

To be disposed of by approved facilities or licence waste collector. Observe all local and national regulations.

Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations.

14. TRANSPORT INFORMATION

	<i>ADR, RID, ADN</i>	<i>IMDG</i>	<i>IATA</i>
14.1 UN number	UN 3266	UN 3266	UN 3266
14.2 UN proper shipping name	Corrosive liquid, basic, inorganic, n.o.s. Contains: Potassium Hydroxide	Corrosive liquid, basic, inorganic, n.o.s. Contains: Potassium Hydroxide	Corrosive liquid, basic, inorganic, n.o.s. Contains: Potassium Hydroxide
14.3 Transport hazard class(es)	8	8	8
14.4 Packaging group	III	III	III
14.5 Environmental hazards	Not Classified	Marine pollutant: yes	Not Classified
14.6 Special precautions for user		No Information	

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

No information available

Hazard Label



15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations

Ingredients

	Potassium Hydroxide 1310-58-3	Sodium metasilicate 10213-79-3	Nonylphenol polyethylene glycol ether 127087-87-0	Ethoxylated alcohols phosphate ether 68130-47-2	Sodium dioctyl sulphosuccinate 577-11-7	Dipropylene glycol monomethyl ether 34590-94-8	Isopropyl Alcohol 67-63-0
Ingredients are on the inventory							
TSCA	No Info.	No Info.	Yes	Yes	No	No Info.	Yes
DSL	Yes	Yes	No Info.	Yes	No	No Info.	Yes
EINECS	Yes	No Info.	Yes	Yes	No Info.	No Info.	Yes
AICS	Yes	Yes	No Info.	Yes	No	No Info.	Yes
ISHL	Yes	No	No Info.	Yes	No	No Info.	Yes
KECI	Yes	Yes	No Info.	Yes	No	No Info.	Yes
IECSC	Yes	Yes	No Info.	Yes	No	No Info.	No Info.
NZIoC:	Yes	Yes	No Info.	Yes	No Info.	No Info.	No Info.
PICCS	Yes	Yes	No Info.	Yes	No	No Info.	Yes
NEA	Yes	No	No	No	No	No	No

Mixture : AS 666

Montreal Protocol	Not Listed
Stockholm Convention	Not Listed
Rotterdam Convention	Not Listed

16. OTHER INFORMATION

Goldcrest International Pte. Ltd. provides the information contained herein in good faith, but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Goldcrest International warrants that this product is of merchantable quality. The implied warranty of fitness for a purpose or uses described on the product's label or in any written instructions or materials distributed to the buyer by Goldcrest International and is hereby disclaimed should buyer use the products in a manner inconsistent with this uses or purposes described therein. In no event shall Goldcrest International Pte. Ltd. be liable for any consequential, exemplary, or incidental damages incurred by buyer even if it has been advised of the possibility of such damages.

Key or legend to abbreviations and acronyms used in the safety data sheet

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures OSHA

STEL = Short Term Exposure Limits are based on 15-minute exposures

TSCA	United States TSCA Inventory
DSL	Canadian Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
AICS	Australia Inventory of Chemical Substances
ISHL	Japan - Inventory of Chemical Substances
KECI	Korean Existing Chemicals Inventory
IECSC	Inventory of Existing Chemical Substances in China
NZIoC:	New Zealand. Inventory of Chemical Substances
PICCS	Philippines Inventory of Chemicals and Chemical Substances
NEA	Singapore - National Environment Agency

Date Issued: 23 Dec 2015

This Safety Data Sheet was prepared in accordance to United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS, 2013)

End of Safety Data Sheet