

SAFETY DATA SHEET

STRIP KLEEN

Infosafe No.: MU3JI
ISSUED Date : 13/10/2017
ISSUED by: INTEGRA INDUSTRIES LTD

CLASSIFIED AS HAZARDOUS

1. IDENTIFICATION

GHS Product Identifier

STRIP KLEEN

Product Code

2052340, 2055380

Company Name

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Recommended use of the chemical and restrictions on use

Stripper and heavy duty cleaner.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.
Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.

6.1D (Oral) - Substance that is acutely toxic

6.8A Substance that is known or presumed to be a human reproductive or developmental toxicant

8.2C Substance that is corrosive to dermal tissue

8.3A Substance that is corrosive to ocular tissue

9.1C Substance that is harmful in the aquatic environment

9.3C Substance that is harmful to terrestrial vertebrates

Signal Word (s)

DANGER

Hazard Statement (s)

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H360D May damage the unborn child.

H402 Harmful to aquatic life.

H433 Harmful to terrestrial vertebrates.

Pictogram (s)

Corrosion, Health hazard

**Precautionary statement – Prevention**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.

Precautionary statement – Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P330 Rinse mouth.
P363 Wash contaminated clothing before reuse.

Precautionary statement – Storage

P405 Store locked up.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Sodium Hydroxide	1310-73-2	1-5%
Ethylene Glycol Monobutyl Ether	111-76-2	10-20%
Ammonium Hydroxide	1336-21-6	1-2%
Triethanolamine	102-71-6	Not specified
Surfactants	-	Not specified
Water	7732-18-5	Remainder

4. FIRST-AID MEASURES

Inhalation

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

Ingestion

- For advice, contact a Poisons Information Centre or a doctor at once.
- Urgent hospital treatment is likely to be needed.
- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration

Skin

If skin or hair contact occurs:

- . Immediately flush body and clothes with large amounts of water, using safety shower if available.
- . Quickly remove all contaminated clothing, including footwear.
- . Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.
- . Transport to hospital, or doctor.

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.

Most important symptoms/effects, acute and delayed

Followed acute or short term repeated exposures to ethylene glycol monoalkyl ethers and their acetates:

- . Hepatic metabolism produces ethylene glycol as a metabolite.
- . Clinical presentation, following severe intoxication, resembles that of ethylene glycol exposures.
- . Monitoring the urinary excretion of the alkoxyacetic acid metabolites may be a useful indication of exposure. [Ellenhorn and Barceloux: Medical Toxicology].

For acute or short term repeated exposures to ethylene glycol:

- Early treatment of ingestion is important. Ensure emesis is satisfactory.
- Test and correct for metabolic acidosis and hypocalcaemia.
- Apply sustained diuresis when possible with hypertonic mannitol.
- Evaluate renal status and begin haemodialysis if indicated. [I.L.O]. for irritant gas exposures:
- the presence of the agent when it is inhaled is evanescent (of short duration) and therefore, cannot be washed away or otherwise removed
- arterial blood gases are of primary importance to aid in determination of the extent of damage. Never discharge a patient significantly exposed to an irritant gas without obtaining an arterial blood sample.
- supportive measures include suctioning (intubation may be required), volume cycle ventilator support (positive and expiratory pressure (PEEP), steroids and antibiotics, after a culture is taken
- If the eyes are involved, an ophthalmologic consultation is recommended.

For acute or short term repeated exposures to ammonia and its solutions:

- Mild to moderate inhalation exposures produce headache, cough, bronchospasm, nausea, vomiting, pharyngeal and retrosternal pain and conjunctivitis.
- Severe inhalation produces laryngospasm, signs of upper airway obstruction (stridor, hoarseness, difficulty in speaking) and, in excessively, high doses, pulmonary oedema.
- Warm humidified air may soothe bronchial irritation.
- Test all patients with conjunctival irritation for corneal abrasion (fluorescein stain, slit lamp exam)
- Dyspneic patients should receive a chest X-ray and arterial blood gases to detect pulmonary oedema.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area

Hazchem Code

2X

Decomposition Temperature

Not available

Other Information

FIRE INCOMPATIBILITY

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

PERSONAL PROTECTION

Glasses: Full face- shield

Gloves: 1.BUTYL 2.NITRILE 3.NEOPRENE

Respirator: Type AK- P Filter of sufficient capacity

6. ACCIDENTAL RELEASE MEASURES

Methods And Materials For Containment And Cleaning Up

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.

Personal Protection

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

7. HANDLING AND STORAGE

Precautions for Safe Handling

- DO NOT allow clothing wet with material to stay in contact with skin.

The tendency of many ethers to form explosive peroxides is well documented. Ethers lacking non-methyl hydrogen atoms adjacent to the ether link are thought to be relatively safe

- DO NOT concentrate by evaporation, or evaporate extracts to dryness, as residues may contain explosive peroxides with DETONATION potential.
- Any static discharge is also a source of hazard.
- Before any distillation process remove trace peroxides by shaking with excess 5% aqueous ferrous sulfate solution or by percolation through a column of activated alumina.
- Distillation results in uninhibited ether distillate with considerably increased hazard because of risk of peroxide formation on storage.

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. An expiration date should be determined. The chemical should either be treated to remove peroxides or disposed of before this date.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with moisture.

Storage Regulations

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

Recommended Materials

SUITABLE CONTAINER

- Polyethylene or polypropylene container.
- Packing as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

Source

Material	TWA ppm	TWA mg/m ³ mg/m ³	STEL ppm mg/m ³	STEL	Peak	Notes
Sodium hydroxide	-	-	-	2	-	
Ethylene glycol monobutyl ether (2-Butoxyethanol)	25	121	-	-	-	skin
Ammonium hydroxide (Ammonia)	25	17	35	24	-	-
triethanolamine (Triethanolamine)	-	5	-	-	-	A2 CARCINOGEN

The following materials had no OELs on our records

- water: CAS:7732- 18- 5

Appropriate Engineering Controls

Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator.

CARE: Explosive vapour air mixtures may be present on opening vessels which have contained liquid ammonia. Fatalities have occurred.

Personal Protective Equipment

RESPIRATOR

Type AK-P Filter of sufficient capacity

EYE

- Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure
- Chemical goggles whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted
- Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection.
- Alternatively a gas mask may replace splash goggles and face shields.

HANDS/FEET

- Elbow length PVC gloves.
 - When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
- Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:
- frequency and duration of contact,
 - chemical resistance of glove material,
 - glove thickness and
 - dexterity.

OTHER

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Liquid	Appearance	Clear white liquid with ammonia odour; mixes with water.
Colour	Clear white liquid	Odour	Ammoniacal Odour
Decomposition Temperature	Not available	Melting Point	Not available
Freezing Point	Not available	Boiling Point	Not available
Solubility in Water	Miscible	Specific Gravity	1.05
pH	pH (1% solution): Not Available pH (as supplied): 13	Vapour Pressure	Not available
Vapour Density (Air=1)	Not Available	Evaporation Rate	Not available
Viscosity	Not available	Volatile Component	Not available
Flash Point	Not applicable	Auto-Ignition Temperature	Not applicable
Explosion Limit - Upper	Not applicable	Explosion Limit - Lower	Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability

Product is considered stable.

Incompatible materials

For incompatible materials - refer to Section 7 - Handling and Storage.

Possibility of hazardous reactions

- Hazardous polymerisation will not occur

Other Information

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.

11. TOXICOLOGICAL INFORMATION

Ingestion

- The material can produce severe chemical burns within the oral cavity and gastrointestinal tract following ingestion.
- The material can produce severe chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.

Eye

- When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation.
- Direct contact with alkaline corrosives may produce pain and burns. Oedema, destruction of the epithelium, corneal opacification and iritis may occur.
- When instilled in rabbit eyes ethylene glycol monobutyl ether produced pain, conjunctival irritation, and transient corneal injury.

Chronic Effects

- Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue.
- Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.
- There is some evidence that human exposure to the material may result in developmental toxicity. This evidence is based on animal studies where effects have been observed in the absence of marked maternal toxicity, or at around the same dose levels as

other toxic effects but which are not secondary non-specific consequences of the other toxic effects.
Exposure to the material may cause concerns for human fertility, on the basis that similar materials provide some evidence of impaired fertility in the absence of toxic effects, or evidence of impaired fertility occurring at around the same dose levels as other toxic effects, but which are not a secondary non-specific consequence of other toxic effects.

On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment.
Prolonged or repeated minor exposure to ammonia gas/vapour may cause long-term irritation to the eyes, nose and upper respiratory tract. Repeated exposure or prolonged contact may produce dermatitis, and conjunctivitis.
Studies with some ethylene glycol ethers and their esters indicate reproductive changes, testicular atrophy, infertility and kidney function changes. The metabolic acetic acid derivatives of the glycol ethers (alkoxyacetic acids), not the ether itself, have been found to be the proximal reproductive toxin in animals.

Other Information

TOXICITY AND IRRITATION

- For ethylene glycol monoalkyl ethers and their acetates (EGMAEs):
Typical members of this category are ethylene glycol propylene ether (EGPE), ethylene glycol butyl ether (EGBE) and ethylene glycol hexyl ether (EGHE) and their acetates.
EGMAEs are substrates for alcohol dehydrogenase isozyme ADH-3, which catalyzes the conversion of their terminal alcohols to aldehydes (which are transient metabolites).
Acute Toxicity: Oral LD50 values in rats for all category members range from 739 (EGHE) to 3089 mg/kg bw (EGPE), with values increasing with decreasing molecular weight.
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.
Exposure of pregnant rats to ethylene glycol monobutyl ether (2-butoxyethanol) at 100 ppm or rabbits at 200 ppm during organogenesis resulted in maternal toxicity and embryotoxicity including a decreased number of viable implantations per litter. Slight foetotoxicity in the form of poorly ossified or unossified skeletal elements was also apparent in rats.
At least one researcher has stated that the reproductive effects were less than that of other monoalkyl ethers of ethylene glycol.

CARCINOGEN

2- Butoxyethanol	International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC	Group	3
Monographs	International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC	Group	3
Monographs			
Triethanolamine			
SKIN			
ethylene glycol monobutyl ether	New Zealand Workplace Exposure Standards (WES) - Skin	Notes	Skin

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Sodium hydroxide	LOW	-	LOW	HIGH
Ethylene glycol monobutyl ether	LOW	LOW	LOW	HIGH
Ammonium hydroxide	LOW	-	LOW	HIGH
Triethanolamine	LOW	-	LOW	HIGH
Water	LOW	-	LOW	HIGH

Other Information

- Triethanolamine 48 hr EC50 (100) mg/L Common shrimp, sand shrimp Crustacea (Source: Experimental)
- Harmful to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Waste Disposal

- Recycle where possible
- Otherwise ensure that:
- licenced contractors dispose of the product and its container.
 - disposal occurs at a licenced facility.

14. TRANSPORT INFORMATION

U.N. Number

1760

UN proper shipping name

CORROSIVE LIQUID, N.O.S.

Transport hazard class(es)

8

Sub.Risk

None allocated

Packing Group

II

Hazchem Code

2X

IERG Number

37

UN Number (Sea Transport)

1760

UN Number (Road Transport)

1760

UN Number (Air Transport, ICAO)

1760

IATA/ICAO Hazard Class

8

IATA/ICAO Packing Group

II

IATA/ICAO Sub Risk

None allocated

IMDG UN No

1760

IMDG Hazard Class

8

IMDG Pack. Group

II

IMDG Subsidiary Risk

None allocated

15. REGULATORY INFORMATION

Regulatory information

This substance should be managed in accordance with the requirements specified in the Cleaning Products (Corrosive, Combustible) Group Standard 2006, HSNO Approval Number HSR002527.

National and or International Regulatory Information

Regulations for ingredients

sodium hydroxide (CAS: 1310-73-2) is found on the following regulatory lists;

"CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "International Council of Chemical Associations (ICCA) - High Production Volume List", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Scheduled Toxic Substances", "New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Workplace Exposure Standards (WES)", "OECD Representative List of High Production Volume (HPV) Chemicals"

ethylene glycol monobutyl ether (CAS: 111-76-2) is found on the following regulatory lists;

"IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Workplace Exposure Standards (WES)", "OECD Representative List of High Production Volume (HPV) Chemicals"

ammonium hydroxide (CAS: 1336-21-6) is found on the following regulatory lists;

"CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Council of Chemical Associations (ICCA) - High Production Volume List", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Scheduled Toxic Substances", "New Zealand Inventory of Chemicals (NZIoC)", "OECD Representative List of High Production Volume (HPV) Chemicals"

triethanolamine (CAS: 102-71-6) is found on the following regulatory lists;

"Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (English)",

"GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "New

Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification

Data", "New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Workplace Exposure Standards (WES)", "OECD Representative List of High Production

Volume (HPV) Chemicals", "The Australia Group Export Control List: Chemical Weapons Precursors"

water (CAS: 7732-18-5) is found on the following regulatory lists;

"IMO IBC Code Chapter 18: List of products to which the Code does not apply", "New Zealand Inventory of Chemicals (NZIoC)", "OECD Representative List of High Production Volume (HPV) Chemicals"

No data for Cascade Strip Kleen

HSNO Approval Number

HSR002527

Other Information

Specific advice on controls required for materials used in New Zealand can be found at <http://www.epa.govt.nz/hazardous-substances/approvals/Pages/default.aspx>.

16. OTHER INFORMATION

Date of preparation or last revision of SDS

13/10/2017

Technical Contact Numbers

24 Hour Emergency Contact: 0800 CHEMCALL (0800 243 622)

New Zealand Poisons Information Centre: 0800 POISON (0800 764 766)

New Zealand Emergency Services: 111

Other Information

The 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.

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since INTEGRA INDUSTRIES LTD cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their INTEGRA INDUSTRIES representative or INTEGRA INDUSTRIES LTD at the contact details on page 1.

INTEGRA INDUSTRIES LTD's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request

END OF SDS

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