

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

Date issued 16.01.2023

1.1. Product identifier

Product name Hyline HLU 30

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

Use of the substance / preparation Alkaline dishwashing liquid with chlorine.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet**Importer**

Company name Hobart Food Equipment

Postal address Unit 1 / 2 Picken Street

Postcode NSW 2128

City Silverwater

Country Australia

Telephone number 02 9714 0200

Website <http://www.hobartfood.com.au>**1.4. Emergency telephone number**

Emergency telephone Description: National Poison Information Centre: 13 11 26

SECTION 2: Hazards identification**2.1. Classification of substance or mixture**Classification according to Regulation (EC) No 1272/2008 [CLP / GHS] Skin Corr. 1A; H314
Eye Dam. 1; H318

CLP classification, comments	Met. Corr. 1; H290 Aquatic Chronic 3; H412 Classified as Hazardous according to the Globally System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations Australia. Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
Substance / mixture hazardous properties	For further information, please refer to section 11.
Additional information on classification	The information stated in this MSDS, applies for the concentrated product. See Sec. 16, for information regarding recommended user solutions

2.2. Label elements

Hazard pictograms (CLP)



Composition on the label	Potassium Hydroxide , Sodium hydroxide , Sodium hypochlorite
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage. H290 May be corrosive to metals. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P280 Wear protective gloves / protective clothing / eye protection / face protection. P303+P361+P353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower. 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 or doctor / physician. P273 Avoid release to the environment.

2.3. Other hazards

Hazard description, general	Do not mix with acid or acid containing products: toxic chlorine gas may be formed.
Health effect	Corrosive to skin and eyes. May cause permanent damage to the eyes, especially if the product is not washed away IMMEDIATELY. See section 11 for additional information on health hazards.
Environmental effects	Substantial amounts of the product may lead to a local change in acidity in small water systems which may have adverse effects on aquatic organisms. This product does not contain any PBT or vPvB substances.
Other hazards	Undiluted, the product may be corrosive to metals.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Potassium Hydroxide	CAS No.: 1310-58-3 EC No.: 215-181-3 Index No.: 019-002-00-8 REACH Reg. No.: 01-2119487136-33-xxxx	Met. Corr. 1; H290 Acute tox. 4;H302 Skin Corr 1A;H314	5 -15 %
Disodium metasilicate, pentahydrate	CAS No.: 10213-79-3 EC No.: 229-912-9 REACH Reg. No.: 01-2119449811-37-xxxx	Skin Corr 1B; H314 Eye Dam. 1; H318 Met. Corr. 1; H290 STOT SE3; H335	5 -15 %
Sodium hydroxide	CAS No.: 1310-73-2 EC No.: 215-185-5 REACH Reg. No.: 01-2119457892-27-xxxx	Skin Corr. 1A; H314 Eye Dam. 1; H318 Met. Corr. 1; H290	1 -5 %
Sodium hypochlorite	CAS No.: 7681-52-9 EC No.: 231-668-3 Index No.: 017-011-00-1 REACH Reg. No.: 01-2119488154-34-xxxx	Met. Corr. 1; H290 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400; M-factor 10 Aquatic Chronic 1; H410; M-factor 1 EUH 031 STOT SE 3; H335	1 < 2,5 %

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Remove affected person from source of contamination.
Inhalation	Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and bring these instructions. In case of chlorine poisoning: Move injured person to fresh air and after that to hospital.
Skin contact	Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if any discomfort continues.
Eye contact	Important! Immediately rinse with water for at least 15 minutes. May cause permanent damage if eye is not immediately irrigated. Make sure to remove any contact lenses from the eyes before rinsing. Immediately transport to hospital or eye specialist. Continue flushing during transport to hospital.
Ingestion	Immediately rinse mouth and drink plenty of water. Call an ambulance. Bring along these instructions. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Do not give victim anything to drink if he is unconscious.
Recommended personal protective equipment for first aid responders	Wear necessary protective equipment. For personal protection, see section 8.

4.2. Most important symptoms and effects, both acute and delayed

Acute symptoms and effects	Strongly corrosive. May cause deep tissue damage. Strongly corrosive. Causes
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Delayed symptoms and effects severe burns and serious eye damage. Immediate first aid is imperative.
The etching penetrates deeply into the tissue and is first noticed after a while.

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

Other information In case of unconsciousness, ingestion or eye contact: Immediately call a doctor / ambulance. Show this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Carbon dioxide, foam or water spray.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards This product is not flammable. During fire, gases hazardous to health may be formed. Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

Hazardous combustion products Toxic gases/vapours/fumes of: Chlorine. Hydrogen chloride (HCl).

5.3. Advice for firefighters

Personal protective equipment Wear necessary protective equipment. For personal protection, see section 8.

Fire fighting procedures Reference is made to the company fire procedure. If risk of water pollution occurs, notify appropriate authorities. Avoid breathing fire vapours.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures Look out! The product is corrosive. Use protective gloves, goggles and suitable protective clothing. In case of inadequate ventilation use suitable respirator. For personal protection, see section 8.

6.2. Environmental precautions

Environmental precautionary measures Avoid discharge into water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.

6.3. Methods and material for containment and cleaning up

Cleaning method Dam and absorb spillage with sand, sawdust or other absorbent. Wash contaminated area with water.

6.4. Reference to other sections

Other instructions See section 8 and section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling

Avoid spilling, skin and eye contact. Use work methods which minimize spreading of vapours, dust, smoke, aerosols, splashes etc. to the extent technically possible. Do not mix with acidic products.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Corrosive liquid. Store in a cool dry well-ventilated area. Store in original packages as approved by manufacture. Store away from oxidising agents and acid. Protect from freezing. Keep container closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Provide a catch-tank in a bunded area. Ensure that storage conditions comply with applicable local and national regulations. For information on the design of the storeroom, reference should be made to Australian Standard AS 3780. The Storage and handling of corrosive substances.

Conditions to avoid

Keep away from acids. Keep away from ammonium salts. Keep away from aluminium, tin, zinc, and galvanised iron. Prevent long contact with glass surfaces

7.3. Specific end use(s)

Specific use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Value	TWA Year
Potassium Hydroxide	CAS No.: 1310-58-3	TWA (8h) : 2 mg/m ³ ; L	TWA Year: 2007
Sodium hydroxide	CAS No.: 1310-73-2	OEL short term value Value: 2 mg/m ³	TWA Year: 2011
Chlorine	CAS No.: 7782-50-5	TWA (8h) : 0,75 mg/m ³ TWA (8h) : 0,25 ppm	TWA Year: 2007

DNEL / PNEC

Substance

Potassium Hydroxide

DNEL

Group: Worker
Route of exposure: Long term (repeated) - Inhalation - Local effect
Value: 1 mg/m³

Group: Consumer
Route of exposure: Long term (repeated) - Inhalation - Local effect
Value: 1 mg/m³

Substance

Disodium metasilicate, pentahydrate

DNEL

Group: Consumer
Route of exposure: Long term (repeated) - Inhalation - Systemic effect
Value: 1,55 mg/m³

	<p>Comments: Supplier MSDS</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Oral - Systemic effect Value: 0,74 mg/kg bw/d Comments: Supplier MSDS</p> <p>Group: Worker Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 1,49 mg/kg bw/d Comments: Supplier MSDS</p> <p>Group: Worker Route of exposure: Long term (repeated) - Inhalation - Systemic effect Value: 6,22 mg/m3 Comments: Supplier MSDS</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Dermal - Systemic effect Value: 0,74 mg/kg bw/d Comments: Supplier MSDS</p>
<p>PNEC</p>	<p>Route of exposure: Sewage treatment plant STP Value: 1000 mg/l Comments: Supplier MSDS</p> <p>Route of exposure: Water Value: 7,5 mg/l Comments: Fresh water. Supplier MSDS</p> <p>Route of exposure: Water Value: 1 mg/l Comments: Marine water, Supplier MSDS</p>
<p>Substance</p> <p>DNEL</p>	<p>Sodium hydroxide</p> <p>Group: Professional Route of exposure: Long term (repeated) - Inhalation - Local effect Value: 1 mg/m3</p> <p>Group: Consumer Route of exposure: Short term (acute) - Dermal - Local effect Value: 2%</p> <p>Group: Consumer Route of exposure: Long term (repeated) - Inhalation - Local effect Value: 1 mg/m3</p> <p>Group: Professional Route of exposure: Short term (acute) - Dermal - Local effect Value: 2%</p>
<p>Substance</p> <p>DNEL</p>	<p>Sodium hypochlorite</p> <p>Group: Professional Route of exposure: Acute inhalation (systemic) Value: 3,1 mg/m³</p> <p>Group: Professional</p>

Route of exposure: Acute inhalation (local)

Value: 3,1 mg/m³

Group: Professional

Route of exposure: Long-term inhalation (systemic)

Value: 1,55 mg/m³

Group: Professional

Route of exposure: Long-term inhalation (local)

Value: 1,55 mg/m³

Group: Professional

Route of exposure: Long-term dermal (local)

Comments: 0,5 %

Group: Consumer

Route of exposure: Long-term inhalation (local)

Value: 1,55 mg/m³

Group: Consumer

Route of exposure: Long-term inhalation (systemic)

Value: 1,55 mg/m³

Group: Consumer

Route of exposure: Acute inhalation (local)

Value: 3,1 mg/m³

Group: Consumer

Route of exposure: Long-term oral (systemic)

Value: 0,26 mg/kg bw/day

PNEC

Route of exposure: Freshwater

Value: 0,21 µg/l

Route of exposure: Saltwater

Value: 0,042 µg/l

Route of exposure: Sewage treatment plant STP

Value: 0,03 mg/l

Value: 0,26 µg/l

Comments: intermittent release

8.2. Exposure controls

Safety signs



Precautionary measures to prevent exposure

Appropriate engineering controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of vapour/mist below the

exposure standards, suitable respiratory protection must be worn.

Eye / face protection

Suitable eye protection

Wear tight-fitting goggles or face shield.

Eye protection, comments

Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand protection

Suitable gloves type

Wear gloves of impervious materials such as rubber or plastic. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Skin protection

Additional skin protection measures

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Respiratory protection

Respiratory protection necessary at

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Thermal hazards

Thermal hazards

See section 5.

Appropriate environmental exposure control

Environmental exposure controls

See section 6.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Fluid.

Colour

Yellowish.

Odour	Chlorine.
Odour limit	Comments: Not relevant.
pH	Status: In delivery state Value: > 13 Status: In aqueous solution Value: ~ 11,0 Concentration: 0,2 % Status: In aqueous solution Value: ~ 12,0 Concentration: 0,6 %
Melting point / melting range	Comments: Not relevant.
Boiling point / boiling range	Comments: Not relevant.
Flash point	Comments: Not relevant.
Evaporation rate	Comments: Not relevant.
Explosion limit	Comments: Not relevant.
Vapour density	Comments: Not relevant.
Bulk density	Value: ~ 1,25 kg/l
Solubility	Comments: Completely soluble in water.
Partition coefficient: n-octanol/ water	Comments: Not relevant.
Spontaneous combustability	Comments: Not relevant.
Decomposition temperature	Comments: Not relevant.
Viscosity	Value: < 30 mPas.
Explosive properties	Not explosive.
Oxidising properties	Does not meet the criteria for oxidising.

9.2. Other information

Other physical and chemical properties

Comments No data recorded.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Generates toxic gas when in contact with acid. Reacts violently with strong acids.

	Comments: Supplier MSDS
Substance	Sodium hypochlorite
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Method: OECD Guideline 401 Value: > 1100 mg/kg Animal test species: Rat Comments: 15% w/w</p> <p>Type of toxicity: Acute Effect tested: LC50 Route of exposure: Inhalation. Method: OECD 403 Duration: 1 hour(s) Value: > 10,5 mg/kg Animal test species: Rat Comments: 15% w/w</p> <p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Method: OECD Guideline 402 Value: > 20000 mg/kg Animal test species: Rabbit Comments: 15% w/w</p>
Other toxicological data	Toxicological tests on the product has not been performed.

Other information regarding health hazards

Assessment of acute toxicity, classification	No evidence for acute toxicity.
Inhalation	Aerosols may be corrosive.
Skin contact	Strongly corrosive. May cause deep tissue damage.
Eye contact	Strongly corrosive. Causes severe burns. Immediate first aid is imperative. May cause permanent damage to the eyes, especially if the product is not washed away IMMEDIATELY.
Ingestion	May cause burns in mucous membranes, throat, oesophagus and stomach.
Sensitisation	No evidence for respiratory nor skin sensitization.
Mutagenicity	No evidence for germ cell mutagenicity.
Carcinogenicity, other information	No evidence for carcinogenicity.
Reproductive toxicity	No evidence for reproductive toxicity.
Assessment of specific target organ SE, classification	No evidence for STOT-single exposure.
Assessment of specific target organ toxicity RE, classification	No evidence for STOT-repeated exposure.
Assessment of aspiration hazard, classification	No evidence for aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Potassium Hydroxide
Acute aquatic, fish	Value: 80 mg/l Test duration: 96h Species: GAMBUSIA AFFINIS Method: LC50
Substance	Disodium metasilicate, pentahydrate
Acute aquatic, fish	Value: 210 mg/l Test duration: 96h Species: brachydanio rerio Method: LC 50 Test reference: Supplier MSDS
Substance	Sodium hydroxide
Acute aquatic, fish	Value: 125 mg/l Species: Gambusia Affinis Method: LC50
Substance	Sodium hypochlorite
Acute aquatic, fish	Value: 0,01-0,1 mg/l Test duration: 96h Species: P.promelas Method: LC50
Substance	Sodium hypochlorite
Acute aquatic, algae	Value: 0,0021 mg/l Method: NOEC
Substance	Disodium metasilicate, pentahydrate
Acute aquatic, Daphnia	Value: 1700 mg/l Test duration: 48h Species: Daphnia magna Method: EC50 Test reference: Supplier MSDS
Substance	Sodium hydroxide
Acute aquatic, Daphnia	Value: 40,4 mg/l Test duration: 48h Species: ceriodaphnia sp. Method: EC50
Substance	Sodium hypochlorite
Acute aquatic, Daphnia	Value: 0,01-0,1 mg/l Test duration: 48h Species: Daphnia Magna Method: EC50
Ecotoxicity	Contains a substance (Aquatic Acute 1; H400 or Aquatic Chronic 1; H410) that falls within the scope of the multiplication factor rule. Large amounts of the product may affect the acidity (pH-factor) in water with

possible risk of harmful effects to aquatic organisms.

Aquatic, comments No data available for the product.

12.2. Persistence and degradability

Persistence and degradability, comments The product is easily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

Mobility The product is water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

PBT assessment results This substance is not classified as PBT or vPvB.

12.6. Other adverse effects

Environmental details, summation Product is harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal Do not empty into drains. Dispose of this material, waste, residues and packaging in accordance with local authority requirements.

SECTION 14: Transport information

Dangerous goods Yes

14.1. UN number

ADR / RID / ADN 1719

IMDG 1719

ICAO / IATA 1719

Comments This material is classified as Dangerous Goods Class 8 Corrosive Substances according to the Australian Code for Transport of Dangerous Goods by Road and Rail (7th edition)
 Class 8 Dangerous Goods are incompatible in placard load with any of the following:
 -Class 1, Explosives
 -Division 4.3, Dangerous When Wet Substances
 -Division 5.1, Oxidising substances
 -Division 5.2, Organic Peroxides
 -Class 6, Toxic or Infectious Substances, if the Class 6 dangerous goods are

cyanides
 and the Class 8 dangerous goods are acids
 -Class 7, Radioactive Substances
 and are incompatible with food and food packaging in any quantity.
 Strong acids must not be loaded in the same freight container or on the same
 vehicle
 with strong alkalis. Packing Group I and II acids and alkalis should be considered
 strong.

14.2. UN proper shipping name

Proper shipping name english ADR / RID / ADN	CAUSTIC ALKALI LIQUID, N.O.S.
ADR / RID / ADN	CAUSTIC ALKALI LIQUID, N.O.S.
Technical name / danger releasing substance ADR / RID / ADN	Potassium hydroxide, Sodium hypochlorite
IMDG	CAUSTIC ALKALI LIQUID, N.O.S.
Technical name / danger releasing substance IMDG	Potassium hydroxide, Sodium hypochlorite
ICAO / IATA	CAUSTIC ALKALI LIQUID, N.O.S.
Technical name / danger releasing substance ICAO	Potassium hydroxide, Sodium hypochlorite

14.3. Transport hazard class(es)

ADR / RID / ADN	8
Classification code ADR / RID / ADN	C5
IMDG	8
ICAO / IATA	8

14.4. Packing group

ADR / RID / ADN	II
IMDG	II
ICAO / IATA	II
Comments	HAZCHEM Code: 2R

14.5. Environmental hazards

IMDG Marine pollutant	No
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14.6. Special precautions for user

Special safety precautions for user	Not relevant.
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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Product name	CAUSTIC ALKALI LIQUID, N.O.S.
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Additional information

ADR / RID / ADN hazard label	8
IMDG Hazard label	8
ICAO / IATA Hazard label	8

ADR / RID - Other information

Tunnel restriction code	E
Transport category	2
Hazard No.	80
RID other applicable information	80

IMDG / ICAO / IATA Other information

EmS	F-A, S-B
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SECTION 15: Regulatory information

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

Other label information

Regulatory information
 Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
 Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
 Poisons Schedule
 S6

15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)

EUH 031 Contact with acids liberates toxic gas.
 H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H318 Causes Serious eye damage.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Skin Corr. 1A; H314 Eye Dam. 1; H318 Met. Corr. 1; H290 Aquatic Chronic 3; H412
Training advice	No particular training or education is required but the user must be familiar with this SDS. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.
Additional information	READY-TO-USE MIXTURE: 0,2-<0,4% Does not require a hazard warning label. READY-TO-USE MIXTURE: ≥0,4% H314 Causes severe skin burns and eye damage.
Key literature references and sources for data	Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice Standard for the Uniform Scheduling of Medicines and Poisons. Australian Code for the Transport of Dangerous Goods by Road & Rail. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals. Workplace exposure standards for airborne contaminants, Safe work Australia. American Conference of Industrial Hygienists (ACGIH) Global ly Harmonised System of classification and labelling of chemicals.
Information added, deleted or revised	Nyt HMS-datablad
User notes	Contact Person/Point The company has taken care in compiling this information. No liability is accepted whether direct or indirect from its application since the conditions of final use are outside the Company's control. The end user is obliged to conform to relevant government regulations and/or patent laws applicable in their respective States of Countries.
Version	2
Prepared by	ALM
Comments	END OF SDS