SAFETY DATA SHEET



Revision date: 02-Apr-2025

Revision Number 1

Section 1: Identification

Product identifier

Product Name STEOL CA-460

Product Code(s) 000000054763

Other means of identification

Proper shipping name ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

UN number or ID number 1170

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Surfactant.

For industrial use only.

Uses advised against No information available.

Details of manufacturer or importer

Supplier

IXOM Operations Pty Ltd ABN: 51 600 546 512 Level 8, 1 Nicholson Street Melbourne 3000 Australia

Telephone Number: +61 3 9906 3000

Emergency telephone number

Emergency telephone number 1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

GHS Classification

Flammable liquids	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Label elements

Flame Corrosion



Signal word DANGER

Hazard statements

H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H318 - Causes serious eye damage

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Ground and bond container and receiving equipment.

Use only non-sparking tools.

Take action to prevent static discharges.

Use explosion-proof electrical/ventilating / lighting/ .? / equipment.

Wash face, hands and any exposed skin thoroughly after handling.

Wash eyes thoroughly after handling.

Wear protective gloves/clothing and eye/face protection.

Precautionary Statements - Response

Specific treatment (see First aid on this SDS).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Call a POISON CENTER or doctor/physician if you feel unwell.

Take off contaminated clothing and wash before reuse.

In case of fire: Use CO2, dry chemical, or foam for extinction.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Other hazards which do not result in classification

Toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
Poly(oxy-1,2-ethanediyl),.asulfowhydroxy-,	67762-19-0	60-<70%
C10-16-alkylethers, ammonium salts		
Ethyl alcohol (Ethanol)	64-17-5	10-<20%
Alcohols, C12-15, ethoxylated	68131-39-5	1-<3%
Other component(s)	-	to 100%

Section 4: First aid measures

Description of first aid measures

General advice

For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New

Zealand 0800 764 766) or a doctor.

Inhalation Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. (Call a

physician if symptoms occur).

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

> eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. (Call a physician if symptoms occur).

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Get medical attention if symptoms

occur.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). **Symptoms**

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Can cause corneal burns. Note to physicians

Section 5: Firefighting measures

Suitable Extinguishing Media

Alcohol resistant foam is the preferred firefighting medium but, if it is not available, fine Suitable extinguishing media

water spray or water fog can be used.

Unsuitable extinguishing media Solid water jet/stream may scatter and spread the fire.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Flammable liquid. Risk of ignition. Vapors can form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Keep product and empty container away from

heat and sources of ignition. Static accumulating flammable liquid can become

electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in

accordance with local regulations.

Hazardous combustion products Oxides of sulfur.

Special protective actions for fire-fighters

Special protective equipment and

precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

Hazchem code •2Y

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid

contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. Ground and bond all lines and equipment associated with product

system. All equipment should be non-sparking. All equipment may need to be

explosion-proof based on a risk assessment. Do not touch or walk through spilled material.

See section 8 for more information.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if

safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far

ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for

later disposal.

Methods for cleaning up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled

containers. Take precautionary measures against static discharges. Use non-sparking tools. Never return spill or leaks to original containers for re-use. After cleaning, flush away traces

with water.

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Keep away from

heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Use personal protection equipment. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

General hygiene considerations Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of

equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct

sunlight. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Keep in an area

equipped with sprinklers.

Incompatible materials Strong oxidizing agents.

Section 8: Exposure controls and personal protection

Control parameters

Exposure Limits

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Chemical name	Australia	New Zealand	ACGIH TLV
Ethyl alcohol (Ethanol)	TWA: 1000 ppm	TWA: 200 ppm	STEL: 1000 ppm
64-17-5	TWA: 1880 mg/m ³	TWA: 380 mg/m ³	
	-	STEL: 800 ppm	
		STEL: 1520 mg/m ³	
		oto	

Chemical name	European Union	United Kingdom	Germany DFG
Ethyl alcohol (Ethanol)	-	TWA: 1000 ppm	TWA: 200 ppm
64-17-5		TWA: 1920 mg/m ³	TWA: 380 mg/m ³
		STEL: 3000 ppm	Peak: 800 ppm
		STEL: 5760 mg/m ³	Peak: 1520 mg/m ³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls

Engineering controls

Eyewash stations. Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.



Eye/face protection

Tight sealing safety goggles.

Overalls. Antistatic boots. Wear suitable protective clothing. Skin and body protection

Hand protection Impervious gloves.

Respiratory protection If determined by a risk assessment an inhalation risk exists, wear an organic

vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls No information available.

Thermal hazards No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid Liquid **Appearance** Color Light yellow

Odor No information available **Odor threshold** No information available

Property Values Remarks • Method

7-7.5 (10% in water) Ha None known pH (as aqueous solution) No data available None known

Melting point / freezing point 1.11°C Boiling point / boiling range 87.78°C

Flash point 27.8°C Pensky-Martens Closed Cup (PMCC)

Evaporation rate None known No data available Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive

No data available limits

Lower flammability or explosive

No data available

limits

Vapor pressure No data available Vapor density No data available Relative density 1.01 @25°C Water solubility No data available

Solubility(ies) No data available None known **Partition coefficient** No data available None known

Autoignition temperature No data available

Decomposition temperature No data available None known Kinematic viscosity No data available None known 66 cP @25°C None known **Dynamic viscosity**

Other information

Pour Point 3.89°C

Section 10: Stability and reactivity

Reactivity

Reactivity Non-reactive under normal conditions of use, storage and transport.

Chemical stability

Stability Stable under normal conditions.

Explosion data

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Sensitivity to mechanical impact None. Sensitivity to static discharge Yes.

Possibility of hazardous reactions

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid

Conditions to avoid Heat, flames and sparks. Direct sunlight. Static discharge (electrostatic discharge).

Incompatible materials

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products Oxides of sulfur.

Section 11: Toxicological information

Information on likely routes of exposure

Product Information No adverse health effects expected if the chemical is handled in accordance with this Safety

Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is

mishandled and overexposure occurs are:

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Causes serious eye damage.

Skin contact Causes skin irritation.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion of

larger amounts may cause defects to the central nervous system (e.g. dizziness,

headache). May cause central nervous system depression.

Symptoms Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness).

Acute toxicity .

Numerical measures of toxicity - Product Information

On basis of test data

 Oral LD50
 > 5000 mg/kg (rat)

 Dermal LD50
 >2000 mg/kg (rabbit)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl alcohol (Ethanol)	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4h
Alcohols, C12-15, ethoxylated	= 1600 mg/kg (Rat)	= 2500 mg/kg (Rabbit)	-

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization Not a respiratory sensitizer.

Germ cell mutagenicity No information available.

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA,

IARC or NTP.

(OSHA - Occupational Safety and Health Administration) (IARC - International Agency for Research on Cancer)

(NTP - National Toxicology Program).

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity Keep out of waterways. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Acute

Algae EC50 Algae > 56 ppm, 72 hours Crustacea EC50 Daphnia > 13 ppm, 48 hours

Fish LC50 Fish >6.3 mg/l, 96 hours.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Ethyl alcohol (Ethanol)	-	LC50: 12.0 - 16.0mL/L	-	LC50: 9268 - 14221
		(96h, Oncorhynchus		mg/L (48h, Daphnia
		mykiss)		magna)
		LC50: >100mg/L (96h,		
		Pimephales promelas)		
		LC50: 13400 -		
		15100mg/L (96h,		
		Pimephales promelas)		

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability

Persistence and degradability Readily biodegradable.

Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Ethyl alcohol (Ethanol)	-0.32

Mobility

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld

containers. Empty containers should be taken to an approved waste handling site for

recycling or disposal.

See section 8 for more information

Section 14: Transport information

ADG Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code

(ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN number or ID number 1170

Proper shipping name ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Transport hazard class(es) 3
Packing group III
Hazchem code •2Y

IATA Classified as Dangerous Goods by the criteria of the International Air Transport Association

(IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number 1170

UN proper shipping name ETHANOL SOLUTION

Transport hazard class(es) 3
Packing group III

IMDG Classified as Dangerous Goods by the criteria of the International Maritime Dangerous

Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number 1170

UN proper shipping name ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Transport hazard class(es)

Packing group

IMDG EMS Fire

F-E

IMDG EMS Spill

S-D

Marine pollutant Not applicable

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

No information available

Section 15: Regulatory information

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

National regulations

Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

Poison Schedule Number Not applicable

Australian Industrial Chemicals Introduction Scheme (AICIS)

Contact supplier for inventory compliance status

	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Poly(oxy-1,2-ethanediyl),.asulfowh ydroxy-, C10-16-alkylethers, ammonium salts - 67762-19-0	Present	-
Ethyl alcohol (Ethanol) - 64-17-5	Present	-
Alcohols, C12-15, ethoxylated - 68131-39-5	Present	-
Other component(s)	Present	-

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

Hazardous chemical

Threshold quantity (T)

Liquids that meet the criteria for Class 3 Packing Group II or III

50 000

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Ethyl alcohol (Ethanol) - 64-17-5	10 tonne/yr Threshold category 1

International Inventories

All the constituents of this material are listed on the Australian Inventory of Industrial

Chemicals.

NZIOC Contact supplier for inventory compliance status.

TSCA Contact supplier for inventory compliance status.

DSL/NDSL
Contact supplier for inventory compliance status.
PICCS
Contact supplier for inventory compliance status.
Contact supplier for inventory compliance status.

Legend:

AllC- Australian Inventory of Industrial Chemicals NZIoC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances **IECSC** - China Inventory of Existing Chemical Substances

KECL - Korean Existing Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Section 16: Other information

Supplier Safety Data Sheet 07/2022

Reason(s) For Issue: First Issue Primary SDS

Prepared By

This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and

SDS Services).

Revision date: 02-Apr-2025

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

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

Legend

SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

C Carcinogen

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

Environmental Protection Agency

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

Australian Industrial Chemicals Introduction Scheme (AICIS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

U.S. National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Disclaimer

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 IXOM Operations Pty 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 IXOM representative or IXOM Operations Pty Ltd at the contact details on page 1.

IXOM Operations Pty 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 Safety Data Sheet