

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SYN-KOOL

**Other means of identification**  
**Part Number** RL059, RL060, RL061

**Recommended use** General-purpose synthetic metalworking fluid

**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** ITW Pro Brands

**Address** 4647 Hugh Howell Rd.  
Tucker, GA 30084

**Country** (U.S.A.)

**In Case of Emergency** Tel: +1 770-243-8800  
1-800-424-9300 (inside U.S.)  
+001 703-527-3887 (outside U.S.)

**Website** www.lpslabs.com

**E-mail** lpssds@itwprobrands.com

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Skin corrosion/irritation Category 1B  
Serious eye damage/eye irritation Category 1

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** Causes severe skin burns and eye damage. Causes serious eye damage.

**Precautionary statement**

**Prevention** Do not breathe mist/vapors. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. Wash contaminated clothing before reuse.

**Storage** Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Diisopropanolamine		110-97-4	5 - 10

Material name: SYN-KOOL

RL059, RL060, RL061 Version #: 01 Issue date: 10-25-2021

Chemical name	Common name and synonyms	CAS number	%
Boric Acid		10043-35-3	1 - 5
Ethyl Alcohol		64-17-5	1 - 5
Monoethanolamine		141-43-5	1 - 5
Diethanolamine		111-42-2	0.1 - 1

#### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Most important symptoms/effects, acute and delayed</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethyl Alcohol (CAS 64-17-5)	PEL	1900 mg/m <sup>3</sup>
		1000 ppm
Monoethanolamine (CAS 141-43-5)	PEL	6 mg/m <sup>3</sup>
		3 ppm

#### US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

Components	Type	Value
Diethanolamine (CAS 111-42-2)	PEL	2 mg/m <sup>3</sup>
		0.46 ppm
Ethyl Alcohol (CAS 64-17-5)	PEL	1900 mg/m <sup>3</sup>
		1000 ppm
Monoethanolamine (CAS 141-43-5)	PEL	8 mg/m <sup>3</sup>
		3 ppm
	STEL	15 mg/m <sup>3</sup>
Triethanolamine (CAS 102-71-6)	PEL	6 ppm
		5 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Boric Acid (CAS 10043-35-3)	STEL	6 mg/m <sup>3</sup>	Inhalable fraction.
	TWA	2 mg/m <sup>3</sup>	Inhalable fraction.
Diethanolamine (CAS 111-42-2)	TWA	1 mg/m <sup>3</sup>	Inhalable fraction and vapor.
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm	
Monoethanolamine (CAS 141-43-5)	STEL	6 ppm	
	TWA	3 ppm	
Triethanolamine (CAS 102-71-6)	TWA	5 mg/m <sup>3</sup>	

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Diethanolamine (CAS 111-42-2)	TWA	15 mg/m <sup>3</sup>
		3 ppm
Ethyl Alcohol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup>
		1000 ppm
Monoethanolamine (CAS 141-43-5)	STEL	15 mg/m <sup>3</sup>
		6 ppm
	TWA	8 mg/m <sup>3</sup>
		3 ppm

### Biological limit values

No biological exposure limits noted for the ingredient(s).

## Exposure guidelines

### US - California OELs: Skin designation

Diethanolamine (CAS 111-42-2)

Can be absorbed through the skin.

### US ACGIH Threshold Limit Values: Skin designation

Diethanolamine (CAS 111-42-2)

Danger of cutaneous absorption

### Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves.

##### Other

Wear appropriate chemical resistant clothing.

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

#### Physical state

Liquid.

#### Form

Liquid.

#### Color

Blue.

#### Odor

Mild.

#### Odor threshold

Not available.

#### pH

9.8 @ 10%

#### Melting point/freezing point

Not available.

#### Initial boiling point and boiling range

212 °F (100 °C)

#### Flash point

> 199.4 °F (> 93.0 °C) Pensky-Martens Closed Cup

#### Evaporation rate

< 1

#### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not available.

#### Flammability limit - upper (%)

Not available.

#### Explosive limit - lower (%)

Not available.

#### Explosive limit - upper (%)

Not available.

#### Vapor pressure

Not available.

#### Vapor density

Not available.

#### Relative density

Not available.

### Solubility(ies)

#### Solubility (water)

Soluble.

#### Partition coefficient (n-octanol/water)

Not available.

#### Auto-ignition temperature

Not available.

#### Decomposition temperature

Not available.

#### Viscosity

Not available.

**Other information**

<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Specific gravity</b>	1.05

**10. Stability and reactivity**

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the decomposition temperature. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Peroxides. Phenols.
<b>Hazardous decomposition products</b>	Carbon oxides.

**11. Toxicological information****Information on likely routes of exposure**

<b>Inhalation</b>	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes severe skin burns.  Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Causes digestive tract burns.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
---	---

**Information on toxicological effects**

<b>Acute toxicity</b>	Not expected to be acutely toxic.
-----------------------	-----------------------------------

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Boric Acid (CAS 10043-35-3)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
<b>Inhalation</b>		
LC50	Rat	> 0.002 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	> 2600 mg/kg
Diethanolamine (CAS 111-42-2)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	710 mg/kg
Diisopropanolamine (CAS 110-97-4)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	8000 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg

Components	Species	Test Results
Ethyl Alcohol (CAS 64-17-5)		
<b>Acute</b>		
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	51 mg/l, 6 Hours
Monoethanolamine (CAS 141-43-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	1000 mg/kg
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	> 1.3 mg/l, 6 Hours
<b>Oral</b>		
LD50	Rat	1100 mg/kg
Triethanolamine (CAS 102-71-6)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	6400 mg/kg
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	Risk of cancer cannot be excluded with prolonged exposure.	
<b>ACGIH Carcinogens</b>		
Boric Acid (CAS 10043-35-3)	A4 Not classifiable as a human carcinogen.	
Diethanolamine (CAS 111-42-2)	A3 Confirmed animal carcinogen with unknown relevance to humans.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Diethanolamine (CAS 111-42-2)	2B Possibly carcinogenic to humans.	
Triethanolamine (CAS 102-71-6)	3 Not classifiable as to carcinogenicity to humans.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)</b>		
Not listed.		
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>		
Not listed.		
<b>Reproductive toxicity</b>	Possible reproductive hazard.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not an aspiration hazard.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful. May be harmful if absorbed through skin. Prolonged exposure may cause chronic effects.	
	Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.	

## 12. Ecological information

### Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Boric Acid (CAS 10043-35-3)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Razorback sucker ( <i>Xyrauchen texanus</i> ) > 100 mg/l, 96 hours
Diethanolamine (CAS 111-42-2)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Water flea ( <i>Ceriodaphnia dubia</i> ) 61.8 - 86.04 mg/l, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) 100 mg/l, 96 hours
Ethyl Alcohol (CAS 64-17-5)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> ) 7.7 - 11.2 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout ( <i>Oncorhynchus mykiss</i> ) 42 mg/l, 4 days
Monoethanolamine (CAS 141-43-5)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Rainbow trout,donaldson trout ( <i>Oncorhynchus mykiss</i> ) 114 - 196 mg/l, 96 hours
Triethanolamine (CAS 102-71-6)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Water flea ( <i>Ceriodaphnia dubia</i> ) 565.2 - 658.3 mg/l, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) 10610 - 13010 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

Diethanolamine	1.43
Diisopropanolamine	-0.82
Ethyl Alcohol	-0.31
Monoethanolamine	-1.31
Triethanolamine	-1

**Mobility in soil** Not established.

**Other adverse effects** None known.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]  
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### Toxic Substances Control Act (TSCA)

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Diethanolamine (CAS 111-42-2) Listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Skin corrosion or irritation  
Serious eye damage or eye irritation

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Diethanolamine (CAS 111-42-2)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

#### FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Ethyl Alcohol (CAS 64-17-5) Low priority

### US state regulations

#### US. New Jersey Worker and Community Right-to-Know Act

Diethanolamine (CAS 111-42-2)

Ethyl Alcohol (CAS 64-17-5)

Monoethanolamine (CAS 141-43-5)

Triethanolamine (CAS 102-71-6)

#### California Proposition 65



**WARNING:** This product can expose you to Diethanolamine, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### California Proposition 65 - CRT: Listed date/Carcinogenic substance

Diethanolamine (CAS 111-42-2) Listed: June 22, 2012



**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Boric Acid (CAS 10043-35-3)  
Diethanolamine (CAS 111-42-2)

**International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 10-25-2021  
**Version #** 01

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. ITW Pro Brands cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

**Revision information**

Product and Company Identification: Alternate Trade Names