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Revision Number 5

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

GHS product identifier

Product Name SYN-KOOL

Other means of identification

Synonyms RL059, RL060, RL061

Recommended use of the chemical and restrictions on use

Recommended Use General-purpose synthetic metalworking fluid

Uses advised against No information available

Supplier's details

Manufacturer

ITW Pro Brands
616 East Industrial Street
Dewitt, IA 52742
TEL: 1-800-241-8334 for US
+1 770-243-8800 outside US

Distributor

MSC Industrial Supply Co.
75 Maxess Road
Melville, NY 11747-3151
1-866-438-6767

Emergency telephone number

Emergency Telephone Number

CHEMTREC: 1-800-424-9300 for US/ 703-527-3887 outside US

2. HAZARDS IDENTIFICATION


Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Skin Irritation	Category 1 Subcategory 1B
Serious Eye Damage/Eye Irritation	Category 1
Specific Target Organ Toxicity (Repeated Exposure)	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word	Danger
Hazard Statements	
<ul style="list-style-type: none"> • Causes severe skin burns and eye damage • Causes serious eye damage • May cause damage to organs through prolonged or repeated exposure 	
	
Appearance: Blue	Physical State: Liquid
Odor: Mild	

Precautionary Statements**Prevention**

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Wash face, hands and any exposed skin thoroughly after handling.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wear protective gloves/protective clothing/eye protection/face protection.

General Advice

- If exposed or concerned: Get medical attention/advice Eyes
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

Eyes

- 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.

Skin

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

Storage

- Store locked up.

Disposal

- Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

6% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION / INFORMATION ON INGREDIENTS			
Chemical Name	CAS-No	Weight %	Trade secret
Triethanolamine	102-71-6	3-7	*
Diisopropanolamine	110-97-4	1-5	*
Ethanolamine	141-43-5	1-5	*
Ethanol	64-17-5	1-5	*

**The exact percentage (concentration) of composition has been withheld as a trade secret.*

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash skin with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Remove and wash contaminated clothing before re-use.
Inhalation	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Irritation.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

May burn if exposed to high temperature. Use water spray to cool unopened containers.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

Environmental Precautions

Environmental Precautions Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment

Dike to collect large liquid spills.

Methods for Cleaning Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use personal protective equipment. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE**Precautions for safe handling****Handling**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities**Storage**

Keep container tightly closed.

Incompatible Products

Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Triethanolamine 102-71-6	TWA: 5 mg/m ³	-	-
Ethanolamine 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m ³ (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m ³ (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m ³ STEL: 6 ppm STEL: 15 mg/m ³
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm 10% LEL TWA: 1000 ppm TWA: 1900 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls**Engineering Measures**

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Tightly fitting safety goggles.

Skin and Body Protection

Wear protective gloves/clothing.

Respiratory Protection I

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for

high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Appearance	Blue
Odor	Mild	Odor Threshold	No information available
Property	Values	Remarks/ - Method	
pH	9.8	at 10%	
Melting Point/Range	No data available	None known	
Boiling Point/Boiling Range	100 °C / 212 °F	None known	
Flash Point	> 93 °C / > 200 °F	PMCC	
Evaporation rate	<1	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limits in Air			
upper flammability limit	No data available		
lower flammability limit	No data available		
Vapor Pressure	No data available	None known	
Vapor Density	>1	None known	
Specific Gravity	1.05	None known	
Water Solubility	Soluble in water	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water	No data available	None known	
Autoignition Temperature	No data available	None known	
Decomposition Temperature	No data available	None known	
Viscosity	No data available	None known	
Flammable Properties	Not flammable		
Explosive Properties	No data available		
Oxidizing Properties	No data available		
<u>Other information</u>			
VOC Content (%)	No data available		

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides, Hydrocarbons, Nitrogen oxides (NO_x).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation

Eye Contact

Skin Contact

Ingestion

There is no data available for this product

There is no data available for this product

Causes serious eye irritation.

Causes skin irritation.

There is no data available for this product.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Triethanolamine	= 4190 mg/kg (Rat)	> 2000 mg/kg (Rabbit) > 16 mL/kg (Rat)	-
Diisopropanolamine	= 4765 mg/kg (Rat)	= 8000 mg/kg (Rabbit) = 16000 mg/kg (Rat)	-
Ethanolamine	= 1720 mg/kg (Rat)	= 1 mL/kg (Rabbit) = 1025 mg/kg (Rabbit)	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Irritation

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization

Mutagenic Effects

Carcinogenicity

May cause sensitization by skin contact.

No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed and abused as an alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Triethanolamine		Group 3		

ACGIH: (American Conference of Governmental Industrial Hygienists)

None

IARC: (International Agency for Research on Cancer)

Group 3

OSHA: (Occupational Safety & Health Administration)

X – Present

Reproductive Toxicity
STOT - single exposure

No information available.
Ethanol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage.

STOT - repeated exposure
Aspiration Hazard

May cause disorder and damage to the: Liver.
No information available.

Numerical measures of toxicity - Product

Acute Toxicity 6% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 16469 mg/kg; Acute toxicity estimate

LD50 Dermal 26831 mg/kg; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

6 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Triethanolamine 102-71-6	EC50 72 h: =216mg/L (Desmodesmus subspicatus) EC50 96 h: = 169mg/L (Desmodesmus subspicatus)	LC50 96 h: 10600 - 13000 mg/L flow-through (Pimephales promelas) LC50 96 h: > 1000 mg/L static (Pimephales promelas) LC50 96 h: 450 - 1000 mg/L static (Lepomis macrochirus)		EC50 24 h: = 1386 mg/L (Daphnia magna)
Diisopropanolamine 110-97-4	EC50 72 h: = 270 mg/L (Desmodesmus subspicatus)	LC50 96 h: 1000-2200 mg/L static (Brachydanio rerio) LC50 96 h: 1000-2200 mg/L static (Leuciscus idus)		EC50 48 h: = 277.7 mg/L (Daphnia magna Straus)
Ethanolamine 141-43-5	EC50 72 h: = 15 mg/L (Desmodesmus subspicatus)	LC50: 227 mg/L Pimephales promelas 96 h flow-through LC50: 3684 mg/L Brachydanio rerio 96 h static LC50: 300-1000 mg/L Lepomis macrochirus 96 h static LC50: 114-196 mg/L Oncorhynchus mykiss 96 h static LC50: >200 mg/L Oncorhynchus mykiss 96 h flow-through	EC50 = 110 mg/L 17 h EC50 = 12200 mg/L 2 h EC50 = 13.7 mg/L 30 min	EC50 48 h: = 65 mg/L (Daphnia magna)

Persistence and Degradability
Bioaccumulation

No information available.
No information available.

Chemical Name	Log Pow
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Triethanolamine	-2.53
Diisopropanolamine	-0.79
Ethanolamine	-1.91

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

Not regulated

TDG

Not regulated.

MEX

Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA

Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	CAS-No	California Prop. 65
Diethanolamine	123-91-1	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Triethanolamine	X	X	X		X
Diisopropanolamine		X	X		
Ethanolamine	X	X	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 1	Flammability 1	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal Protection X

**Indicates a chronic health hazard.*

Prepared By ITW Pro Brands
616 East Industrial Street
Dewitt, IA 52742

Revision Date 17-May-2016
Revision Note Added distributor information.

General Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet