SAFETY DATA SHEET



1. Identification

Product identifier	KLEEN KOOL GP METALWORKING FLUID
Other means of identification	
SDS number	Not applicable
Recommended use	METALWORKING FLUID
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/I Manufacturer	Distributor information
Company name	DOALL SAWING PRODUCTS A DOALL COMPANY 2375 Toughy Avenue Elk Grove Village, IL 60007

Telephone (General Information)	888-362-5572, Ext 65047
Emergency telephone number	1-800-424-9300 (CHEMTREC)
Emergency telephone number (outside USA)	1-703-527-3887 (CHEMTREC)

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin irritation	Category 2
	Serious eye irritation	Category 2
	Sensitization, skin	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		

	\checkmark
Signal word	Warning
Hazard statement	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
Precautionary statement	
Prevention	Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear eye protection/face protection. Wear protective gloves.
Response	If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. 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. Take off contaminated clothing and wash before reuse.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

The classified hazards shown on this SDS are associated with the product concentrate. These hazards are not expected under recommended use conditions and dilution.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
TRIETHANOLAMINE		102-71-6	10 - 30
MONOETHANOLAMINE		141-43-5	1 - 5
HEXAHYDRO-1,3,5-TRIS (2-HYDROXYETHYL)-S- TRIAZINE	1	4719-04-4	0.1 - 1
Other components below reportable	e levels		60 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a POISON CENTER or doctor/physician if you feel unwell. Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Drink 1 or 2 glasses of water. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause an allergic skin reaction.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	If exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.
5. Fire-fighting measures	
Suitable extinguishing media	Foam. Water fog. Dry powder. Carbon dioxide (CO2). Use extinguishing measures that are

	appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures 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 or vapor. 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.

Methods and materials for containment and cleaning up	Local authorities should be advised if significant spillages cannot be contained. This product is miscible in water. Clean up in accordance with all applicable regulations.
	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.
Environmental precautions	Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.
7. Handling and storage	
Precautions for safe handling	Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapor. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Do not allow material to freeze. Store away from incompatible materials (see Section 10 of the SDS). If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use.

8. Exposure controls/personal protection

Occupational exposure limits

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

		Туре	Value
US. NIOSH: Pocket Guide to Chemical Hazards Type Value MONOETHANOLAMINE (CAS 141-43-5) STEL 15 mg/m3 MUX 8 mg/m3 3 ppm 6 ppm US. ACGIH Threshold Limit Values TWA 8 mg/m3 3 ppm US. ACGIH Threshold Limit Values Type Value MONOETHANOLAMINE (CAS 141-43-5) STEL 6 ppm TRIETHANOLAMINE (CAS TWA 5 mg/m3 102-71-6) MONOETHANOLAMINE (CAS TWA 5 mg/m3 102-71-6) MONOETHANOLAMINE (CAS TWA 3 ppm Good general ventilation (typically 10 air changes per hour) 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 below recommended exposure limits. If exposure limits have not been established, maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels below recommended. Stkin protection Wear safety glasses with side shields (or goggles). Do not get in eyes. Eye wash fountain is recommended. Skin protection Use protective gloves m		PEL	6 mg/m3
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Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.	Hand protection	Use protective gloves made of: Nitr	ile.
	Other	Wear suitable protective clothing.	
Thermal hazards Wear appropriate thermal protective clothing, when necessary.	Respiratory protection	In case of insufficient ventilation, we	ear suitable respiratory equipment.
	Thermal hazards	Wear appropriate thermal protective	e clothing, when necessary.

When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. 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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

5. Thysical and chemical	
Appearance	CLEAR
Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	CHEMICAL
Odor threshold	Not available.
рН	10.2
Melting point/freezing point	< -10 °F (< -23.3 °C)
Initial boiling point and boiling range	> 212 °F (> 100 °C)
Flash point	Not Applicable
Evaporation rate	Like water when diluted
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive 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)	100 % Water Miscible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	9.4
Specific gravity	1.077
VOC ASTM D2369	15 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, flames and sparks. Contact with incompatible materials.
Incompatible materials	Acids. Oxidizing agents. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines.
Hazardous decomposition products	Smoke, fumes, oxides of nitrogen, and oxides of carbon

11. Toxicological information

Information on likely routes of exposure

Inhalation	Not classified.
Skin contact	Causes skin irritation. May cause sensitization by skin contact.
Eye contact	Causes eye irritation.
Ingestion	Not classified.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause an allergic skin reaction.

Information on toxicological effects

Acute toxicity	May cause an allergic skin reaction.	
Components	Species	Test Results
MONOETHANOLAMINE (CAS 14	41-43-5)	
<u>Acute</u>		
Dermal		
LD50	Rabbit	1025 mg/kg
Oral		
LD50	Guinea pig	620 mg/kg
	Mouse	700 mg/kg
	Rat	10.2 g/kg
TRIETHANOLAMINE (CAS 102-7	71-6)	
Acute		
Dermal		
Liquid		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Guinea pig	5300 mg/kg
Liquid		
LD50	Rat	4190 mg/kg
* Estimates for product may I	be based on additional component data not	shown.
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes eye irritation.	
Respiratory or skin sensitizatio	n	
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered to be a ca	rcinogen by IARC, ACGIH, NTP, or OSHA.
IARC Monographs. Overall	Evaluation of Carcinogenicity	
TRIETHANOLAMINE (C US. National Toxicology Pr	AS 102-71-6) 3 Not cla rogram (NTP) Report on Carcinogens	ssifiable as to carcinogenicity to humans.
Not listed. US. OSHA Specifically Reg	ulated Substances (29 CFR 1910.1001-10	50)
Not regulated.		
Reproductive toxicity	This product is not expected to cause rep	productive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.	

Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Not classified.
Further information	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

12. Ecological information

Ecotoxicity	Contains a substance which causes risk of hazardous effects to the environment.		fects to the environment.
Components		Species	Test Results
MONOETHANOLAMINE	(CAS 141-43-5)		
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	114 - 196 mg/l, 96 hours
TRIETHANOLAMINE (C	AS 102-71-6)		
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	565.2 - 658.3 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	10610 - 13010 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.	
Bioaccumulative potential		
Partition coefficient n-octa	nol / water (log Kow)	
MONOETHANOLAMINE	-1.31	
TRIETHANOLAMINE	-1	
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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	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 toNot established.Annex II of MARPOL 73/78 andthe IBC Code

15. Regulatory information

US federal regulations

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

TOCA Continue 42(b) Furnant	Notification (40 CED 207 Subat D)	
	Notification (40 CFR 707, Subpt. D) S (2-HYDROXYETHYL)-S- 1.0 % One-Time Export Notificat -4)	ion only.
CERCLA Hazardous Substa		
Not listed. SARA 304 Emergency relea	se notification	
Not regulated. US. OSHA Specifically Regu	ulated Substances (29 CFR 1910.1001-1050)	
Not regulated.		
Superfund Amendments and Re	authorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
SARA 302 Extremely hazard Not listed.	dous substance	
SARA 311/312 Hazardous chemical	Yes	
SARA 313 (TRI reporting) Not regulated.		
Other federal regulations		
•	112 Hazardous Air Pollutants (HAPs) List	
Not regulated.	ζ, γ	
0	112(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.		
Safe Drinking Water Act (SDWA)	Not regulated.	
Food and Drug Administration (FDA)	Not regulated.	
US state regulations		
US. California Controlled Su	ubstances. CA Department of Justice (California Health and Sa	fety Code Section 11100)
Not listed.		
US. Massachusetts RTK - S	ubstance List	
MONOETHANOLAMINE		
	AS 102-71-6) I Community Right-to-Know Act	
MONOETHANOLAMINE		
TRIETHANOLAMINE (C/		
MONOETHANOLAMINE TRIETHANOLAMINE (C/		
US. Rhode Island RTK		
Not regulated.		
California South Coast Air Quality Management District (SCAQMD) Rule 1144 (VOC Emissions)	This product is subject to SCAQMD Rule 1144; it is compliant an SCAQMD. The VOC content of the product is 108 g/L, measured This product has a specified use dilution VOC limit of 75 g/L, the is 69 % to maintain compliance.	by ASTM Method E-1868-10.
US. California Proposition 6 WARNING: This product	5 contains a chemical known to the State of California to cause canc	er.
•	tion 65 - CRT: Listed date/Carcinogenic substance	
-	CACID (CAS 139-13-9) Listed: January 1, 1988	
International Inventories		
Country(s) or region	Inventory name	On inventory or exempt (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes

Country(s) or region	Inventory name	On inventory or exempt (yes/no)*
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	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico *A "Yes" indicates this product co	Toxic Substances Control Act (TSCA) Inventory mplies with the inventory requirements administered by the governing count	try(s)

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

Issue date	03-10-2015
Revision date	08-23-2016
Version #	05
Further information	Not available.
NFPA ratings	Health: 1 Flammability: 0 Instability: 0
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.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.