

SAFETY DATA SHEET

ISSUE DATE: APRIL 1 2016

REVISION DATE: 02-DEC-2014

1. IDENTIFICATION



PRODUCT IDENTIFIER: 45TW63 All Purpose Vinegar

PRODUCT NAME: TOUGH GUY VINEGAR CLEANER

OTHER MEANS OF IDENTIFICATION:

SDS #: TGV-023

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:

RECOMMENDED USE: CLEANING AGENT.

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:

SUPPLIER ADDRESS:

WW GRAINGER

100 GRAINGER PARKWAY

LAKE FOREST, IL 60045

EMERGENCY TELEPHONE NUMBER:

COMPANY PHONE NUMBER: 800-535-1000

EMERGENCY TELEPHONE (24 HR):

INFOTRAC:

1-352-323-3500 (INTERNATIONAL)

1-800-535-5053 (NORTH AMERICA)

2. HAZARDS IDENTIFICATION



APPEARANCE: CLEAR LIQUID

PHYSICAL STATE: LIQUID

ODOR: FRESH

CLASSIFICATION:

SKIN CORROSION/IRRITATION: CATEGORY 2

SERIOUS EYE DAMAGE/EYE IRRITATION: CATEGORY 1

SIGNAL WORD: DANGER

HAZARD STATEMENTS:
CAUSES SKIN IRRITATION
CAUSES SERIOUS EYE DAMAGE

CORROSION

PRECAUTIONARY STATEMENTS - PREVENTION:
DO NOT BREATHE DUST/FUME/GAS/MIST/VAPORS/SPRAY
WASH FACE, HANDS AND ANY EXPOSED SKIN THOROUGHLY AFTER HANDLING
WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION

PRECAUTIONARY STATEMENTS - RESPONSE:
IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN

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 (OR HAIR):
REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH
WATER/SHOWER WASH CONTAMINATED CLOTHING BEFORE REUSE

IF INHALED:
REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE
FOR BREATHING IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN

IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING

PRECAUTIONARY STATEMENTS - STORAGE: STORE LOCKED UP

PRECAUTIONARY STATEMENTS - DISPOSAL:
DISPOSE OF CONTENTS/CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT

3. COMPOSITION/INFORMATION ON INGREDIENTS



CHEMICAL NAME	CAS NO	WEIGHT-%
ACETIC ACID	64-19-7	1-10

IF CHEMICAL NAME/CAS NO IS "PROPRIETARY" AND/OR WEIGHT-% IS LISTED AS A
RANGE, THE SPECIFIC CHEMICAL IDENTITY AND/OR PERCENTAGE OF COMPOSITION
HAS BEEN WITHHELD AS A TRADE SECRET.

4. FIRST-AID MEASURES



FIRST AID MEASURES:

GENERAL ADVICE: IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN.

EYE CONTACT:

REMOVE CONTACT LENSES, FLUSH EYES WITH COOL RUNNING WATER HOLDING EYELIDS APART TO ENSURE THOROUGH RINSING FOR 15 MINUTES. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN.

SKIN CONTACT: WASH WITH SOAP AND WATER.

INHALATION:

REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN.

INGESTION:

RINSE MOUTH. DO NOT INDUCE VOMITING. DRINK LARGE AMOUNTS OF WATER. NEVER GIVE ANYTHING BY MOUTH TO A PERSON WHO IS UNCONSCIOUS OR CONVULSING. SEEK MEDICAL ATTENTION IMMEDIATELY.

MOST IMPORTANT SYMPTOMS AND EFFECTS:

SYMPTOMS: CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

NOTES TO PHYSICIAN: TREAT SYMPTOMATICALLY.

5. FIRE-FIGHTING MEASURES



SUITABLE EXTINGUISHING MEDIA:

WATER. CARBON DIOXIDE (CO₂). DRY CHEMICAL. FOAM.

UNSUITABLE EXTINGUISHING MEDIA: NOT DETERMINED.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: NOT DETERMINED.

HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON.

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 AS REQUIRED.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

METHODS FOR CONTAINMENT:

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO.

METHODS FOR CLEAN-UP:

FOR SMALL SPILLS: WIPE UP OR MOP UP.

FOR LARGE SPILLS:

CONTROL SPILL WITH ABSORBENT; TRANSFER TO NON-LEAKING CONTAINERS. RINSE AREA THOROUGHLY.

7. HANDLING AND STORAGE



PRECAUTIONS FOR SAFE HANDLING:

ADVICE ON SAFE HANDLING:

DO NOT BREATHE DUST/FUME/GAS/MIST/VAPORS/SPRAY. WASH FACE, HANDS, AND ANY EXPOSED SKIN THOROUGHLY AFTER HANDLING. WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING AND EYE/FACE PROTECTION.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

STORAGE CONDITIONS:

STORE LOCKED UP. STORE IN A COOL, DRY AND WELL-VENTILATED AREA.

INCOMPATIBLE MATERIALS: STRONG ACIDS.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



EXPOSURE GUIDELINES:

CHEMICAL NAME	ACGIH TLV	OSHA PEL	NIOSH IDLH
ACETIC ACID 64-19-7	STEL: 15 PPM	TWA: 10 PPM	IDLH: 50 PPM
	TWA: 10 PPM	TWA: 25 MG/M3	TWA: 10 PPM
		(VACATED) TWA: 10 PPM	TWA: 25 MG/M3
		(VACATED) TWA: 25 MG/M3	STEL: 15 PPM
			STEL: 37 MG/M3

APPROPRIATE ENGINEERING CONTROLS:

ENGINEERING CONTROLS:

APPLY TECHNICAL MEASURES TO COMPLY WITH THE OCCUPATIONAL EXPOSURE LIMITS.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: SAFETY GLASSES.

SKIN AND BODY PROTECTION: WEAR GLOVES FOR PROLONGED EXPOSURE.

RESPIRATORY PROTECTION:
ENSURE ADEQUATE VENTILATION, ESPECIALLY IN CONFINED AREAS.

GENERAL HYGIENE CONSIDERATIONS:
HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.

9. PHYSICAL AND CHEMICAL PROPERTIES



INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE: LIQUID

APPEARANCE: CLEAR LIQUID

ODOR: FRESH

COLOR: COLORLESS

ODOR THRESHOLD: NOT DETERMINED

PROPERTY	VALUES	REMARKS - METHOD
PH	2.88	
MELTING POINT/FREEZING POINT	NOT DETERMINED	
BOILING POINT/BOILING RANGE	NOT AVAILABLE	
FLASH POINT	95 DEG. C / 203 DEG. F	TAG CLOSED CUP
EVAPORATION RATE	NOT DETERMINED	
FLAMMABILITY (SOLID, GAS)	LIQUID-NOT APPLICABLE	
UPPER FLAMMABILITY LIMITS	NOT DETERMINED	
LOWER FLAMMABILITY LIMIT	NOT DETERMINED	
VAPOR PRESSURE	NOT AVAILABLE	
VAPOR DENSITY	NOT DETERMINED	
SPECIFIC GRAVITY	1.00-1.010	
WATER SOLUBILITY	100% SOLUBLE	
SOLUBILITY IN OTHER SOLVENTS	NOT DETERMINED	
PARTITION COEFFICIENT	NOT DETERMINED	
AUTO-IGNITION TEMPERATURE	NOT DETERMINED	
DECOMPOSITION TEMPERATURE	NOT DETERMINED	
KINEMATIC VISCOSITY	NOT DETERMINED	

DYNAMIC VISCOSITY	NOT DETERMINED
EXPLOSIVE PROPERTIES	NOT DETERMINED
OXIDIZING PROPERTIES	NOT DETERMINED

10. STABILITY AND REACTIVITY



REACTIVITY: NOT REACTIVE UNDER NORMAL CONDITIONS.

CHEMICAL STABILITY: STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS: NONE UNDER NORMAL PROCESSING.

CONDITIONS TO AVOID: EXCESSIVE HEAT AND FIRE. INCOMPATIBLE MATERIALS.

INCOMPATIBLE MATERIALS: STRONG ACIDS.

HAZARDOUS DECOMPOSITION PRODUCTS: OXIDES OF CARBON.

11. TOXICOLOGICAL INFORMATION



INFORMATION ON LIKELY ROUTES OF EXPOSURE:

PRODUCT INFORMATION:

EYE CONTACT: CAUSES SERIOUS EYE DAMAGE.

SKIN CONTACT: CAUSES SKIN IRRITATION.

INHALATION: DO NOT INHALE.

INGESTION: DO NOT INGEST.

COMPONENT INFORMATION:

CHEMICAL NAME	ORAL LD50	DERMAL LD50	INHALATION LC50
ACETIC ACID	= 3310 MG/KG	= 1060 MG/KG	= 11.4 MG/L (RAT) 4 H
64-19-7	(RAT)	(RABBIT)	

INFORMATION ON PHYSICAL, CHEMICAL AND TOXICOLOGICAL EFFECTS:

SYMPTOMS: PLEASE SEE SECTION 4 OF THIS SDS FOR SYMPTOMS.

DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:

CARCINOGENICITY:

THIS PRODUCT DOES NOT CONTAIN ANY CARCINOGENS OR POTENTIAL CARCINOGENS AS

LISTED BY OSHA, IARC OR NTP.

NUMERICAL MEASURES OF TOXICITY: NOT DETERMINED

12. ECOLOGICAL INFORMATION

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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.

COMPONENT INFORMATION:

CHEMICAL NAME	ALGAE/AQUATIC PLANTS	FISH	TOXICITY TO MICROORGANISMS	CRUSTACEA
ACETIC ACID 64-19-7		79: 96 H PIMEPHALES PROMELAS MG/L LC50 STATIC	EC50: 8.8 MG/L 15 MIN EC50: 8.8 MG/L 25 MIN	47: 24 H DAPHNIA MAGNA MG/L EC50 65: 48 H DAPHNIA MAGNA MG/L EC50 STATIC
		75: 96 H LEPOMIS MACROCHIRUS MG/L LC50 STATIC	EC50: 8.8 MG/L 5 MIN	

PERSISTENCE/DEGRADABILITY: NOT DETERMINED.

BIOACCUMULATION: NOT DETERMINED.

MOBILITY:

CHEMICAL NAME	PARTITION COEFFICIENT
ACETIC ACID 64-19-7	-0.31

OTHER ADVERSE EFFECTS: NOT DETERMINED

13. DISPOSAL CONSIDERATIONS

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WASTE TREATMENT METHODS:

DISPOSAL OF WASTES:

DISPOSAL SHOULD BE IN ACCORDANCE WITH APPLICABLE REGIONAL, NATIONAL AND LOCAL LAWS AND REGULATIONS.

CONTAMINATED PACKAGING:

DISPOSAL SHOULD BE IN ACCORDANCE WITH APPLICABLE REGIONAL, NATIONAL AND

LOCAL LAWS AND REGULATIONS.

CALIFORNIA HAZARDOUS WASTE STATUS:

CHEMICAL NAME	CALIFORNIA HAZARDOUS WASTE STATUS
ACETIC ACID	TOXIC
64-19-7	CORROSIVE
	IGNITABLE

14. TRANSPORT INFORMATION



NOTE:

PLEASE SEE CURRENT SHIPPING PAPER FOR MOST UP TO DATE SHIPPING INFORMATION, INCLUDING EXEMPTIONS AND SPECIAL CIRCUMSTANCES.

DOT: NOT REGULATED

IATA: NOT REGULATED

IMDG: NOT REGULATED

15. REGULATORY INFORMATION



INTERNATIONAL INVENTORIES:

CHEMICAL NAME	TSCA	DSL	NDSL	EINECS
ACETIC ACID	PRESENT	X		PRESENT

CHEMICAL NAME	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
ACETIC ACID		PRESENT	X	PRESENT	X	X

LEGEND:

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 AND EVALUATED CHEMICAL SUBSTANCES

PICCS: PHILIPPINES INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES

AICS: AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES

US FEDERAL REGULATIONS:

CERCLA:

CHEMICAL NAME	HAZARDOUS SUBSTANCES RQS	CERCLA/SARA RQ	REPORTABLE QUANTITY (RQ)
ACETIC ACID	5000 LB		RQ 5000 LB FINAL RQ
64-19-7			RQ 2270 KG FINAL RQ

SARA 313:

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

CWA (CLEAN WATER ACT):

CHEMICAL NAME	CWA - REPORTABLE QUANTITIES	CWA - TOXIC POLLUTANTS	CWA - PRIORITY POLLUTANTS	CWA - HAZARDOUS SUBSTANCES
ACETIC ACID	5000 LB			X

US STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

THIS PRODUCT DOES NOT CONTAIN ANY PROPOSITION 65 CHEMICALS.

U.S. STATE RIGHT-TO-KNOW REGULATIONS:

CHEMICAL NAME	NEW JERSEY	MASSACHUSETTS	PENNSYLVANIA
ACETIC ACID	X	X	X
64-19-7			

16. OTHER INFORMATION



NFPA:

HEALTH HAZARDS	NOT DETERMINED
FLAMMABILITY	NOT DETERMINED
INSTABILITY	NOT DETERMINED
SPECIAL HAZARDS	NOT DETERMINED

HMIS:

HEALTH HAZARDS	1
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PERSONAL PROTECTION	B

ISSUE DATE: 01-APRIL-2015

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REVISION NOTE: NEW FORMAT

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.