CRC

SAFETY DATA SHEET

1. Identification

Product identifier Knock'er Loose® Plus Penetrating Solvent

Other means of identification

Product code 03027

Recommended use Penetrant

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name CRC Industries, Inc. Address 885 Louis Dr.

Warminster, PA 18974 US

Telephone

General Information 215-674-4300 **Technical** 800-521-3168

Assistance

 Customer Service
 800-272-4620

 24-Hour Emergency
 800-424-9300 (US)

(CHEMTREC) 703-527-3887 (International)
Website www.crcindustries.com

2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1

Gases under pressure

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2

Sensitization, skin Category 1

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Aspiration hazard Category 1
Hazardous to the aquatic environment, Category 3

Environmental hazards Hazardous to the aquatic environment,

long-term hazard

OSHA defined hazards Not classified.

Label elements

Health hazards



Signal word Danger

Hazard statement Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes

swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Cause serious eye irritation. May cause respiratory irritation. Harmful to aquatic life with long lasting

effects.

Precautionary statement Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not apply while equipment is energized. Pressurized container: Do not pierce or burn, even after use. Extinguish all flames, pilot lights and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Avoid breathing mist or vapor. Avoid breathing gas. Wear protective gloves and eye/face protection. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment

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If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash Response with plenty of water. If skin irritation or rash occurs: Get medical attention. Take off contaminated

clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. 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 attention.

Storage Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to

temperatures exceeding 50°C/122°F. Exposure to high temperature may cause can to burst.

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

Hazard(s) not otherwise classified (HNOC)

None known

Supplemental information

95.01% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

/lixtures			
Chemical name	Common name and synonyms	CAS number	%
1,1-Difluoroethane	HFC-152a	75-37-6	50 - 60
Distillates (petroleum), hydrot middle	reated	64742-46-7	20 - 30
Dipropylene glycol monometh ether acetate	yl	88917-22-0	5 - 10
Dipropylene glycol monopropy ether (dpmp)	yl	29911-27-1	5 - 10
Turpentine, oil		8006-64-2	5 - 10
2,6-Dimethyl-4-heptanone		108-83-8	1 - 3
Fatty ester		Proprietary	1 - 3
Pinus sylvestris extract		94266-48-5	1 - 3
Stoddard Solvent		8052-41-3	1 - 3

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON
mmaiation	Tromovo vidim to moon an and roop at root in a position connectable for broat ing. can a root or

CENTER or doctor/physician if you feel unwell.

Remove contaminated clothing immediately and wash skin with soap and water. If skin irritation or Skin contact

rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

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. Aspiration may

cause pulmonary edema and pneumonitis.

Most important symptoms/effects, acute and delayed

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause an allergic skin reaction. Dermatitis. Rash. May cause redness and pain.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

Ingestion

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water.

Unsuitable extinguishing media

None known.

Specific hazards arising from

the chemical

Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Special protective equipment

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

and precautions for firefighters Fire-fighting

In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without

equipment/instructions risk. Containers should be cooled with water to prevent vapor pressure build up.

General fire hazards Extremely flammable aerosol.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing gas. Ventilate closed spaces before entering them. 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

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Stop the flow of material, if this is without risk. Collect spillage. Dike far ahead of spill for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Avoid breathing mist or vapor. Avoid breathing gas. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

8. Exposure controls/personal protection

US. OSHA Table Z-1 Limits for Air	Contaminants (29 CFR 1910.	•	
Components	Туре	Value	Form
2,6-Dimethyl-4-heptanone (CAS 108-83-8)	PEL	290 mg/m3	
		50 ppm	
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	PEL	5 mg/m3	Mist.
Stoddard Solvent (CAS 8052-41-3)	PEL	2900 mg/m3	
,		500 ppm	
Turpentine, oil (CAS 8006-64-2)	PEL	560 mg/m3	
ŕ		100 ppm	
US. ACGIH Threshold Limit Value	s		
Components	Туре	Value	Form
2,6-Dimethyl-4-heptanone (CAS 108-83-8)	TWA	25 ppm	
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	TWA	5 mg/m3	Inhalable fraction.
Stoddard Solvent (CAS 8052-41-3)	TWA	100 ppm	
Turpentine, oil (CAS 8006-64-2)	TWA	20 ppm	
US. NIOSH: Pocket Guide to Cher	nical Hazards		
Components	Туре	Value	Form
	TWA	150 mg/m3	

Components	Туре	Value	Form
		25 ppm	
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	STEL	10 mg/m3	Mist.
•	TWA	5 mg/m3	Mist.
Stoddard Solvent (CAS 8052-41-3)	Ceiling	1800 mg/m3	
,	TWA	350 mg/m3	
Turpentine, oil (CAS 8006-64-2)	TWA	560 mg/m3	
•		100 ppm	
US. AIHA Workplace Environmer	ital Exposure Level (WEEL) Guid	des	
Components	Туре	Value	
1,1-Difluoroethane (CAS 75-37-6)	TWA	2700 mg/m3	
		1000 ppm	

Biological limit values

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

Appropriate engineering controls

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 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).

Skin protection

Hand protection Wear protective gloves such as: Nitrile. Rubber. Wear appropriate chemical resistant clothing.

Wear positive pressure self-contained breathing apparatus (SCBA). Air monitoring is needed to Respiratory protection

determine actual employee exposure levels.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. 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

Appearance

Physical state Liquid. **Form** Aerosol. Color Red.

Odor Pleasant pine. **Odor threshold** Not available. Not available. pН

-121 °F (-85 °C) estimated Melting point/freezing point 311 °F (155 °C) estimated Initial boiling point and boiling

range

Flash point

147 °F (63.9 °C) Tag Closed Cup

Moderate **Evaporation rate** Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

0.7 % estimated

(%)

Flammability limit - upper

7.1 % estimated

(%)

3923.1 hPa estimated Vapor pressure

Vapor density > 1 (air = 1)0.88 estimated Relative density

Solubility (water) Negligible.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 401 °F (205 °C) estimated

Decomposition temperatureNot available.Viscosity (kinematic)Not available.Percent volatile100 % estimated

10. Stability and reactivity

ReactivityThe 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 Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents. Chlorine.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion May be fatal if swallowed and enters airways.

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an

allergic skin reaction. Skin irritation. May cause redness and pain. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. May cause an allergic skin reaction. May cause

respiratory irritation.

Product Species Test Results

Knock'er Loose® Plus Penetrating Solvent

Acute

Dermai

LD50 Rabbit 14705.7637 mg/kg estimated

Inhalation

LC50 Rat 114 mg/l, 4 hours estimated

Oral

LD50 Rat 9395.1074 mg/kg estimated

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

ACGIH sensitization

Turpentine, oil (CAS 8006-64-2)

Sensitiser.

Respiratory sensitization Not available.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicityNo 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 carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Respiratory tract irritation.

Specific target organ toxicity -

repeated exposure

Not classified.

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

May be fatal if swallowed and enters airways. **Aspiration hazard**

Prolonged inhalation may be harmful. **Chronic effects**

12. Ecological information

Product		Species	Test Results
Knock'er Loose® Plus	s Penetrating Solve	nt	
Acute			
Crustacea	EC50	Daphnia	853.211 mg/l, 48 hours estimated
Fish	LC50	Fish	4000 μg/l, 96 hours estimated
Components		Species	Test Results

Dipropylene glycol monomethyl ether acetate (CAS 88917-22-0)

Aquatic

Acute

Crustacea LC50 Water flea (Daphnia magna) 2701 mg/l, 48 hours Fish LC50 Fathead minnow (Pimephales promelas) 151 mg/l, 96 hours Rainbow trout, donaldson trout 111 mg/l, 96 hours

(Oncorhynchus mykiss)

Dipropylene glycol monopropyl ether (dpmp) (CAS 29911-27-1)

Aquatic

Acute

Crustacea EC50 Water flea (Daphnia magna) > 100 mg/l, 48 hours Fish LC50 Rainbow trout, donaldson trout > 100 mg/l, 96 hours (Oncorhynchus mykiss)

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available. Partition coefficient n-octanol / water (log Kow)

1,1-Difluoroethane 0.75

Dipropylene glycol monomethyl ether acetate 0.61 OECD 107 Dipropylene glycol monopropyl ether (dpmp) 0.87 OECD 107 Stoddard Solvent 3.16 - 7.15

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 of waste from residues / unused products

The dispensed liquid product is not a RCRA hazardous waste (See 40 CFR Part 261.20 - 261.33). Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush.

Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable

regulations.

Hazardous waste code Not regulated.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

UN number UN1950

UN proper shipping name Aerosols, flammable, Limited Quantity

Transport hazard class(es)

2.1 Class Subsidiary risk 2.1 Label(s)

Not applicable. Packing group

Read safety instructions, SDS and emergency procedures before handling. Special precautions for user

Special provisions Packaging exceptions 306 Packaging non bulk None

Material name: Knock'er Loose® Plus Penetrating Solvent

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

Packaging bulk None

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable, Limited Quantity

Transport hazard class(es)

Class 2.1 Subsidiary risk -

Packing group Not applicable.

Environmental hazards No. **ERG Code** 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed.

Cargo aircraft only Allowed.

IMDG

UN number UN1950

UN proper shipping name AEROSOLS, LIMITED QUANTITY

Transport hazard class(es)

Class 2 Subsidiary risk -

Packing group Not applicable.

Environmental hazards

Marine pollutant No.

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910,1200.

All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

CERCLA Hazardous Substances: Reportable quantity

Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

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

Not regulated.

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

1,1-Difluoroethane (CAS 75-37-6)

Safe Drinking Water Act

Not regulated.

(SDWA)

Food and Drug Not regulated.

Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Nο

Section 311/312 Immediate Hazard - Yes
Hazard categories Delayed Hazard - No
Fire Hazard - Yes

Pressure Hazard - Yes Reactivity Hazard - No

SARA 302 Extremely hazardous substance

US state regulations

US. New Jersey RTK - Substances: Listed substance

1,1-Difluoroethane (CAS 75-37-6)

2,6-Dimethyl-4-heptanone (CAS 108-83-8)

Stoddard Solvent (CAS 8052-41-3)

Turpentine, oil (CAS 8006-64-2)

US. Massachusetts RTK - Substance List

1,1-Difluoroethane (CAS 75-37-6)

2,6-Dimethyl-4-heptanone (CAS 108-83-8)

Stoddard Solvent (CAS 8052-41-3)

Turpentine, oil (CAS 8006-64-2)

US. Pennsylvania RTK - Hazardous Substances

2,6-Dimethyl-4-heptanone (CAS 108-83-8)

Stoddard Solvent (CAS 8052-41-3)

US. Rhode Island RTK

1,1-Difluoroethane (CAS 75-37-6)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Volatile organic compounds (VOC) regulations

FΡΔ

VOC content (40 CFR

50 %

51.100(s))

Consumer products

Not regulated

Inventory name

(40 CFR 59, Subpt. C)

State

Consumer products This product is regulated as a Penetrant. This product is compliant for use in all 50 states.

VOC content (CA) 12.5 % **VOC content (OTC)** 12.5 %

International Inventories

Country(s) or region

		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
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)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Toxic Substances Control Act (TSCA) Inventory

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

Issue date 03-21-2014 **Prepared by** Allison Cho

Version # 01

United States & Puerto Rico

Further information CRC # 548A

HMIS® ratings Health: 1
Flammability: 3

Physical hazard: 0
Personal protection: B

NFPA ratings Health: 1

Flammability: 3 Instability: 0

On inventory (yes/no)*

Yes

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).

Disclaimer

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.