



SAFETY DATA SHEET

Europe

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or mixture

Product name	SETSIT® 5	<u>In case of emergency</u>
Chemical name	Activated dithiocarbamate in propyl cellosolve	+1-203-853-1400
Synonyms	Activated dithiocarbamate in 2-propoxyethanol	Chemtrec: +1-800-424-9300
Use of the substance/mixture	Latex accelerator	Outside US: +1-703-527-3887
Code	37604	

Company/undertaking identification

Supplier R. T. Vanderbilt Company, Inc.
30 Winfield Street
Norwalk, CT 06855

e-mail address of person responsible for this SDS MSDS@rtvanderbilt.com

2. Hazards identification

Physical state	Liquid.
Color	Brownish-red.
Emergency overview	WARNING! COMBUSTIBLE LIQUID AND VAPOR. HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE ALLERGIC SKIN REACTION. Contains material which causes damage to the following organs: blood, kidneys, liver. Keep away from heat and flame. Do not get in eyes or on skin or clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification R10
Xn; R21
Xi; R36
R43

Physical/chemical hazards Flammable.

Human health hazards Harmful in contact with skin. Irritating to eyes. May cause sensitization by skin contact.

See Section 11 for more detailed information on health effects and symptoms.

3. Composition/information on ingredients

<u>Substance/preparation</u>	Preparation			
<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>	<u>EC number</u>	<u>Classification</u>
Activated dithiocarbamate		55 - 65		Not classified.
2-propoxyethanol	2807-30-9	25 - 30	220-548-6	Xn; R21 Xi; R36 [1]
water	7732-18-5	10 - 15	231-791-2	Not classified.

See section 15 for the full text of the R-phrases declared above

[1] Substance classified with a health or environmental hazard

3. Composition/information on ingredients

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

4. First aid measures

Eye contact

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation

Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

See Section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Flammability of the product

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Extinguishing media

Suitable

Use dry chemical, CO₂, water spray (fog) or foam.

Not suitable

Do not use water jet.

Special exposure hazards

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous combustion products

Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special remarks on fire hazards

Release of carbon disulfide in acid media may result in a flammable mixture in the headspace.

Ignition may occur at typical elevated-temperature process conditions, especially in processes operating under vacuum if subjected to sudden ingress of air, or outside process equipment operating under elevated pressure if sudden escape of vapors or mists to the atmosphere occurs. Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

Special remarks on explosion hazards

Hot organic chemical vapor or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below those published in the literature as "autoignition" or "ignition" temperatures. Ignition temperatures decrease with increasing vapor volume and vapor/air contact time and are influenced by pressure changes.

6. Accidental release measures

Personal precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

Handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Store according to OSHA 29 CFR 1910.106.

If freezing or crystallization occurs, warm slowly to room temperature and stir well.

Storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

Recommended

Use original container.

8. Exposure controls/personal protection

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Exposure controls

8. Exposure controls/personal protection

Occupational exposure controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: Vapor and dust respirator.

Hands

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Recommended: Protective gloves should be worn under normal conditions of use.

Eyes

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles

Skin

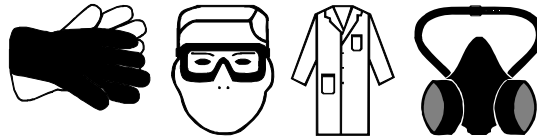
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Recommended: lab coat

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Personal protective equipment (Pictograms)



9. Physical and chemical properties

General information

Appearance

Physical state

Liquid.

Color

Brownish-red.

Important health, safety and environmental information

pH

Not available.

Boiling point

Not available.

Melting point

Not available.

Flash point

Closed cup: 43°C (109.4°F) [Tagliabue.]

Auto-ignition temperature

Not available.

Explosive properties

Hot organic chemical vapor or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below those published in the literature as "autoignition" or "ignition" temperatures. Ignition temperatures decrease with increasing vapor volume and vapor/air contact time and are influenced by pressure changes.

Vapor pressure

Not available.

Density

0.99 g/cm³ [25°C (77°F)]

Solubility

Partially soluble in the following materials: cold water.

9. Physical and chemical properties

Partition coefficient: n-octanol/water	Not available.
Viscosity	Not available.
Vapor density	Not available.
Evaporation rate	Not available.

10. Stability and reactivity

Stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid	Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Incompatibility with various substances	Reactive or incompatible with the following materials: acids. Carbon disulfide will be released in acid media, or in buffered systems below pH 8. In a closed system, complete decomposition could produce carbon disulfide concentrations at or above the lower explosion limit. Release of carbon disulfide in acid media may result in a flammable mixture in the headspace. Ignition may occur at typical elevated-temperature process conditions, especially in processes operating under vacuum if subjected to sudden ingress of air, or outside process equipment operating under elevated pressure if sudden escape of vapors or mists to the atmosphere occurs. Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

11. Toxicological information

Potential acute health effects

Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin	Toxic in contact with skin. Slightly irritating to the skin.
Eyes	Severely irritating to eyes. Risk of serious damage to eyes.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-propoxyethanol	LD50 Dermal	Rabbit	>1000 mg/kg	-
	LD50 Oral	Rat	3089 mg/kg	-
	LC50 Inhalation	Rat	>2132 ppm	6 hours
	Vapor			

Conclusion/Summary Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary In animal studies, effects have been reported on the following organs: blood (hemolysis) and secondary effects on the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-propoxyethanol	Eyes - Severe irritant	Rabbit	-	-	-
	Skin - Mild irritant	Guinea pig	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-

Conclusion/Summary Not available.

11. Toxicological information

Sensitizer

Conclusion/Summary

Skin

Contains a component which has been known to cause allergic skin reactions.

Carcinogenicity

Conclusion/Summary

Not available.

Mutagenicity

Conclusion/Summary

Not available.

Teratogenicity

Conclusion/Summary

Not available.

Reproductive toxicity

Conclusion/Summary

Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

Chronic effects

Contains material that can cause target organ damage.

Over-exposure signs/symptoms

Skin

Adverse symptoms may include the following:
irritation
redness

Eyes

Adverse symptoms may include the following:
pain or irritation
watering
redness

Target organs

Contains material which causes damage to the following organs: blood, kidneys, liver.

12. Ecological information

Environmental effects

No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name

2-propoxyethanol

Test

-

Result

EC50 >1000 mg/l

Species

Micro-organism -
Bacteria

Exposure

- 16 hours

Conclusion/Summary

Not available.

Biodegradability

Conclusion/Summary

Not available.

Other adverse effects

No known significant effects or critical hazards.

13. Disposal considerations

Methods of disposal

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste

The classification of the product may meet the criteria for a hazardous waste.






RCRA classification

D001

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	1993	Flammable liquids, n.o.s., (2-(propyloxy)ethanol)	3	III		-
TDG Classification	1993	Flammable liquids, n.o.s., (2-(propyloxy)ethanol)	3	III		-
ADR/RID Class	1993	Flammable liquids, n.o.s., (2-(propyloxy)ethanol)	3	III		Special provisions 640 (E) Tunnel code (D/E)
IMDG Class	1993	Flammable liquids, n.o.s., (2-(propyloxy)ethanol)	3	III		-
IATA-DGR Class	1993	Flammable liquids, n.o.s., (2-(propyloxy)ethanol)	3	III		-

PG* : Packing group

15. Regulatory information

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols



Harmful

Risk phrases

R10- Flammable.
R21- Harmful in contact with skin.
R36- Irritating to eyes.
R43- May cause sensitization by skin contact.

Safety phrases

S24/25- Avoid contact with skin and eyes.
S36/37- Wear suitable protective clothing and gloves.
S46- If swallowed, seek medical advice immediately and show this container or label.

Contains

2-propoxyethanol

220-548-6

Europe inventory

Not determined.

International regulations

International lists

United States inventory (TSCA 8b) : All components are listed or exempted.

Canada inventory : All components are listed or exempted.

Australia inventory (AICS): Not determined.

China inventory (IECSC): Not determined.

Japan inventory: All components are listed or exempted.

Korea inventory: Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

16. Other information

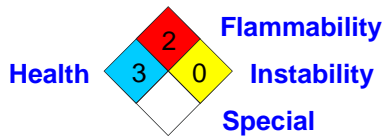
Hazardous Material Information System (U.S.A.)

Health	3
Flammability	2
Physical hazards	0
Personal protection	

* Chronic Potential

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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 +1-203-853-1400

▣ Indicates information that has changed from previously issued version.

Visit www.rtvanderbilt.com for more information.

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