

## SAFETY DATA SHEET

**Item Code: AC1082 & AC1083**

Section 1.	Identification of the material and the supplier
------------	---

Item Code:	AC1082 & AC1083
Product:	NSC Beta Plus Fast
Product Use:	Adhesive
New Zealand Supplier:	Realcold Ltd
Address:	9 Prescott Street Penrose, Auckland
Telephone:	09 526 5700
Fax Number:	09 526 5721
<b>Emergency Telephone:</b>	<b>09 526 5700</b> <b>0800 766 764 (National Poison Centre)</b>
Manufacturer:	National Start & Chemical, 5-7 Averton Place, East Tamaki
Date of MSDS Preparation:	14 March 2017 – ver 2

Section 2.	Hazards Identification
------------	------------------------

**This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001***

**Group Standard & ERMA Approval Code: Surface Coatings and Colourants (Flammable) – HSR002662**

**Pictograms**



Flammable



Toxic



Chronic



Ecotoxic

HSNO Class.	Hazard Code	Hazard Statement	EU Risk Phrases
-------------	-------------	------------------	-----------------

3.1B	H225	Highly flammable liquid and vapour.	R11
6.1D (oral)	H302	Harmful if swallowed.	R22
6.1D (dermal)	H312	Harmful in contact with skin.	R21
6.1D (inhalation-vapours)	H332	Harmful if inhaled.	R20
6.3B	H316	Causes mild skin irritation.	R38
6.4Af	H319	Causes serious eye irritation.	R41
6.7B	H351	Suspected of causing cancer	R49
6.9B (Repeated)	H373	May cause damage to organs through prolonged or repeated exposure	R48

exposure)			
9.2B	H422	Toxic to the soil environment.	R56
9.3C	H433	Harmful to terrestrial vertebrates.	Not known

**Prevention Code      Prevention Statement**

P102	Keep out of reach of children.
P103	Read label before use.
P104	Read safety data sheet before use
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, open flames and hot surfaces*. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical and ventilating
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe fumes or vapours.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective clothing including gloves and goggles.

**Response Code      Response Statement**

P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P338	Remove contact lenses, if present and easy to do. Continue rinsing.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use Dry agent, carbon dioxide or foam for extinction

**Storage Code      Storage Statement**

P405	Store locked up.
P403 + P235	Store in a well-ventilated place. Keep cool.

**Disposal Code****Disposal Statement**

P501	Dispose of according to local regulations
------	---

**Section 3. Composition / Information on Ingredients**

<b>Ingredients</b>	<b>Wt%</b>	<b>CAS NUMBER.</b>
Tetrahydrofuran (THF)	10-60%	109-99-9
Cyclohexanone	1-10%	108-94-1
Methyl Ethyl Ketone (mek)	1-10%	78-93-3
Non hazardous ingredients	Remainder	Not Available

**Section 4. First Aid Measures**

Routes of Exposure:

If in Eyes	Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately.
If on Skin	Remove contaminated clothing and wash skin with warm soapy water. Do not scrub. If swelling, redness, blistering or irritation occurs, get medical assistance
If Swallowed	If swallowed, call a physician immediately. DO NOT induce vomiting. Never give anything by mouth to an unconscious person.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

**Section 5. Fire Fighting Measures**

<b>Hazard Type</b>	Highly Flammable
<b>Hazards from decomposition products</b>	Vapours may form explosive mixtures with air. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, heaters, naked lights, pilot lights, mobile phones etc. when handling. Earth containers when dispensing fluids.
<b>Suitable Extinguishing media</b>	Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways. Absorb runoff with sand or similar.
<b>Precautions for firefighters and special protective clothing</b>	Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
<b>HAZCHEM CODE</b>	<b>3YE</b>

**Section 6. Accidental Release Measures**

If spilt (bulk), contact emergency services where appropriate. Wear splash-proof goggles, butyl gloves, a Type A (Organic vapour) respirator (or Full-face Air-line respirator in poorly ventilated areas), coveralls and boots. Ventilate and clear area of all unprotected personnel. Eliminate all heat and ignition sources. Absorb spill with sand or similar, collect and place in sealable containers for disposal.

## Section 7. Handling and Storage

**Handling** Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

**Storage** Store in cool, dry, well ventilated area, preferably flammables store, removed from direct sunlight, heat and ignition sources, oxidising agents (eg. peroxides), acids (eg. nitric acid) and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Large storage areas should have appropriate fire protection and ventilation systems.

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Cyclohexanone	25	100		
Methyl ethyl ketone (MEK)	150		300	
Tetrahydrofuran	100			

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

**Engineering Controls** Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical explosion proof extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

**Personal Protection** Wear splash-proof goggles, butyl gloves and coveralls. Where an inhalation risk exists, wear a Type A (Organic vapour) Respirator. At high vapour levels, wear an Air-line respirator.

## Section 9 Physical and Chemical Properties

**Appearance** Clear Liquid  
**Odour** Solvent Odour

Product Name: NSC Beta Plus Fast    Item No: AC1082 & AC1083    Issued by: Realcold Ltd  
 Date of MSDS: 20 December 2011    Tel: 64 9 526 5700

<b>Flash Point</b>	-15°C
<b>Boiling Point</b>	66°C
<b>Lower &amp; Upper Flammability Limits</b>	2.0 – 11.8%
<b>Auto-ignition Temperature</b>	321°C
<b>Percent Volatile</b>	80%
<b>Specific Gravity</b>	1.0
<b>Solubility in Water</b>	Slightly soluble

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	Stable under recommended conditions of storage.
<b>Conditions to Avoid</b>	Avoid heat, sparks, open flames and other ignition sources.
<b>Incompatible Materials</b>	Incompatible with oxidising agents (eg. hypochlorites, peroxides), acids (eg. sulphuric acid), heat and ignition sources.
<b>Hazardous Decomposition Products</b>	May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.
<b>Polymerization</b>	Will react with strong oxidising agents.

## Section 11 Toxicological Information

Cyclohexanone Cas No [108-94-1]	LC50 (Inhalation): 8000 ppm/4 hours (rat) LD50 (Ingestion): 1400 mg/kg (mouse) LD50 (Skin): 948 mg/kg (rabbit)
Methyl Ethyl Ketone (mek) [78-93-3]	LC50 (Inhalation): 23500 mg/kg (rat) LD50 (Ingestion): 2737 mg/kg (rat) LD50 (Skin): 6480 mg/kg (rabbit)
Tetrahydrofuran (THF) [109-99-9]	LC50 (Inhalation): 21000 ppm/3 hours (rat) LD50 (Ingestion): 1650 mg/m3 (rat)

This product has the potential to cause acute and chronic health effects. High level acute exposure may cause anaesthesia. Use safe work practices to avoid eye or skin contact and vapour inhalation. Chronic exposure may result in liver or kidney damage and CNS depression.

<u>Eye</u>	Exposure may result in lacrimation, irritation, pain, redness, conjunctivitis and possible corneal burns with prolonged contact.
<u>Inhalation</u>	Over exposure may result in mucous membrane irritation of the nose and throat, At high vapour concentrations anaesthesia and unconsciousness. Chronic exposure may result in liver or kidney damage and CNS depression.
<u>Skin</u>	Prolonged contact may result in drying and defatting of the skin, rash and dermatitis. Toxic effects may result from skin absorption.
<u>Ingestion</u>	Ingestion may result in nausea, vomiting, abdominal pain, dizziness, fatigue and diarrhoea. Large doses may cause kidney and liver damage, unconsciousness and convulsions. Aspiration into lungs may cause chemical pneumonitis and pulmonary oedema.

## Section 12. Ecotoxicological Information

### Environment

Methyl ethyl ketone (MEK) vapour in the atmosphere will degrade primarily by reaction with photochemically produced hydroxyl radicals. MEK will volatilise from the soil and water surfaces and is highly mobile with in soil.  
MEK will not bioconcentrate and is rapidly biodegradable.

### Ecotoxicity

Ecotoxic in the soil environment. Harmful to terrestrial vertebrates..

### Persistence /Degradability

The solvent in this product is readily biodegradable. The remainder of the product is expected to biodegrade slowly.

### Mobility

Partially miscible with water. Similar density to water.

## Section 13. Disposal Considerations

Waste Disposal For small amounts, mix with sand and dispose of to approved landfill. For larger quantities, dissolve in flammable solvent and incinerate at an approved facility equipped with after burner and scrubber.

Legislation Dispose of in accordance with relevant local legislation.

## Section 14 Transport Information

Classified as a Dangerous Good for transport

Road and Rail Transport (in NZ ; NZS 5433:2007)

UN No: 1133  
Class-primary 3  
Packing Group 1  
Proper Shipping Name: Adhesives containing Flammable Liquid

### Air Transport

UN No: 1133  
Class-primary 3  
Packing Group 1  
Proper Shipping Name: Adhesives containing Flammable Liquid

### Marine Transport

UN No: 1133  
Class-primary 3  
Packing Group 1  
Proper Shipping Name: Adhesives containing Flammable Liquid

## Section 15 Regulatory Information

ERMA Approval Code: Surface Coatings and Colourants (Flammable) – HSR002662

HSNO Classification: 3.1B, 6.1D, 6.3B, 6.4A, 6.7B, 6.9B, 9.2B, 9.3C

HSNO Controls:

Trigger quantities for this substance:

	<b>Trigger Quantity</b>
Approved Handler	250L ≥ if container ≥ 5L 500L ≥ if container ≤ 5L
Location Certificate	100L (>5L), 250L (<5L); 50L open.
Tracking Trigger Quantities	Not applicable
Signage Trigger Quantities	250L

Product Name: NSC Beta Plus Fast  
Date of MSDS: 20 December 2011

Item No: AC1082 & AC1083

Issued by: Realcold Ltd  
Tel: 64 9 526 5700

Emergency Response Plan trigger Quantities	1000L
--	-------

<b>Section 16</b>	<b>Other Information</b>
-------------------	--------------------------

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

Disclaimer

This document has been issued by Realcold Limited and serves as their Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to Realcold Limited or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While Realcold Limited have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Realcold Limited accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

The information herein is given in good faith, but no warranty, express or implied is made.

Please contact the New Zealand distributor, Realcold Ltd, if further information is required.

Issue Date: 20 December 2011

Review Date: 20 December 2016